

GO FAST, GO BIG, GO EARLY, AND GO SMART:
THE AIR NATIONAL GUARD IN COMPLEX CATASTROPHES

BY

BRITT HATLEY, LtCol, USAF

A THESIS PRESENTED TO THE FACULTY OF
THE SCHOOL OF ADVANCED AIR AND SPACE STUDIES
FOR COMPLETION OF GRADUATION REQUIREMENTS

SCHOOL OF ADVANCED AIR AND SPACE STUDIES

AIR UNIVERSITY

MAXWELL AIR FORCE BASE, ALABAMA

JUNE 2012

APPROVAL

The undersigned certify that this thesis meets master's-level standards of research, argumentation, and expression.

Lt Col. DAVID W. WOODWORTH

Col. M.V. SMITH



DISCLAIMER

The conclusions and opinions expressed in this document are those of the author. They do not reflect the official position of the US Government, Department of Defense, the United States Air Force, or Air University. In accordance with Air Force Instruction 51-303, it is not copyrighted, but is the property of the United States government.



ABOUT THE AUTHOR

Lieutenant Colonel Britt Hatley received his commission as a distinguished graduate from the USAF Reserve Officer Training Corps in May 1995. A USAF Weapons School graduate, he has a broad background in bomber operations in both the B-52H and B-2 to include operational test and evaluation, training, planning, survivability, and Air Operations Center experience. His most recent assignment was the Director of Operations for both the Air National Guard's 110th Bomb Squadron and active-duty 394th Combat Training Squadron. Lt Col Hatley deployed in support of Operations Southern Watch, Desert Fox, Allied Force, and Pacific Command's Continuous Bomber Presence. Lt Col Hatley was a distinguished graduate and outstanding squadron graduate of Squadron Officer School and completed Air Command and Staff College by correspondence. He has a Bachelor of Arts degree, magna cum laude, in History from Louisiana Tech University, a Master of Science degree in Aviation Safety from the University of Central Missouri, and a Master of Philosophy in Military Strategy from the School of Advanced Air and Space Studies. Upon graduation from SAASS, Lt Col Hatley will assume command of the 110th Bomb Squadron, Missouri Air National Guard, Whiteman AFB, Missouri.



ACKNOWLEDGMENTS

As with any degree-granting endeavor, the work on this thesis began as a hurdle to surmount for graduation, but over time evolved into an enriching learning experience. To that end, there are several people I must acknowledge for their contributions. First to my advisor, Lt Col Dave “Woody” Woodworth, for his patience, subtle suggestions, and critical eye. To Brigadier General Bruce Prunk, Oregon Air National Guard, for opening the door to the ever-changing world of Air National Guard Domestic Operations. To Ken Franklin and Dave VanGasbeck at the National Guard Bureau for their tireless patience, willingness to answer countless questions, and for introducing me to the people, processes, and machinery that comprise Air National Guard Domestic Operations. Any errors contained herein are mine and mine alone. Most importantly, I must thank my wife. As we transitioned from active-duty, to the airline industry, and finally to the Air National Guard, she has been the steadying force in my life. While I was trying to figure out what I wanted to be when I grew up, she kept “wings level” on the home front. Lastly, to my beautiful children for their smiles and laughter are the things I most cherish.



ABSTRACT

Can the Air National Guard (ANG) go fast, go big, go early, and go smart in a complex catastrophe? In other words, can the ANG respond quickly and efficiently with adequate capacity in a timely manner to save and sustain lives in the face of a humanitarian disaster exponentially larger than Hurricane Katrina? Devastating earthquakes in Haiti, Chile, and Japan illustrated vividly and tragically the human, economic, and social impact of such a catastrophic disaster.

Cognizant of the threat complex catastrophes pose to national resilience, the President issued Presidential Policy Directive (PPD-8) National Preparedness. As such, the Department of Homeland Security, FEMA, and supporting agencies were tasked to define national preparedness, build frameworks to support preparedness, and examine how the nation may respond collectively in a whole of community approach.

Consequently, the Secretary of Defense solicited the Department of Defense (DOD) for recommendations to improve DOD support of civil authorities during a complex catastrophe while allowing for no additional force structure. The ANG's inherent dual-use role, civil support lineage, and geographical dispersion throughout the 54 states and territories suggest the ANG can play a role in combating the effects of a complex catastrophe. To that end, this work examines four questions.

First, does the ANG possess unique and specialized capabilities, capable of spanning many missions, and are multi-purpose. Second, can the ANG arrive quickly and provide a safe and secure environment for local, state, and private sector partnerships to work effectively. Third, where should the ANG reside in an integrated DOD wide effort to bring forces to bear in a timely fashion should governors ask for support. Lastly, can the ANG leverage its capabilities across FEMA regions vice simply in and around local bases. The scope is limited to the ANG specifically vice the National Guard as a whole.

Analysis suggests the ANG can go fast, go big, and go early, but cannot go smart in a complex catastrophe. The Air Guard can respond in a quick and timely manner to save and sustain lives but lacks the mechanism to employ its substantial capacity efficiently. Consequently, recommendations are made to strengthen the ANG's civil support mechanism particularly in areas of sourcing and funding.

CONTENTS

Chapter	Page
DISCLAIMER	ii
ABOUT THE AUTHOR	iii
ACKNOWLEDGMENTS	iv
ABSTRACT	v
INTRODUCTION	1
1 FOUNDATION	10
2 UNIQUE CAPABILTITES	21
3 NATIONAL CIVIL SUPPORT CAPABILTIES	39
4 STRENGTHS AND CHALLENGES	54
CONCLUSION	75
BIBLIOGRAPHY	78

Illustrations

Table	Page
1 Air National Guard Unit Type Codes vs. Response Core Capabilities	26
2 Number of Air National Guard Essential 10 Personnel Corresponding to Federal Emergency Management Agency Regions	31
3 Emergency Support Function Correlation to ANG Essential 10 Capabilities	33
4 Air National Guard Essential 10 Personnel Correlation to Emergency Support Functions	34

Figure	Page
1 National Guard Civil Support and Defense Support Civil Authorities Summary	14
2 Federal Emergency Management Agency Regions	30

3	Survey of Air National Guard Medical Capability	46
4	Air National Guard Fixed/Rotary Wing Airlift Assets	49
5	Department of Defense Mission Assignment Process	60



Introduction

On Mar 16, 2011, Richter scales measured a 7.7 magnitude earthquake in the southwest segment of the New Madrid Seismic Zone (NMSZ). Destruction extended from Marked Tree, Arkansas, to Ridgely, Tennessee. Aftershocks traveled to Carmel, Illinois with several approaching 6.0 in magnitude. The affected geographic region was immense. Unprecedented destruction resulted in widespread casualties, displaced households, and damage to major infrastructure across eight states-Alabama, Arkansas, Illinois, Indiana, Kentucky, Mississippi, Missouri, and Tennessee.¹ Efforts to respond to this and pre-existing tornado-related disasters in the southern and central US (Alabama, Missouri, Tennessee, and Kentucky) pushed local, state, and federal responders to their breaking point.

The earthquake devastated residential areas. Damaged transportation infrastructure and the sheer number of evacuees merged with limited transportation resources to slow evacuation efforts forcing more than 2,000,000 people to shelter in place for long periods while waiting for evacuation.² Many evacuated as far away as Michigan to lessen the impact to states already reeling from the cascading effects of the earthquake.³ The humanitarian needs for the sheltered and evacuated were immense: 32.4 million liters of water, 38.8 million meals, 991,000 cots, and 1.9 million blankets.⁴

The earthquake's effects crippled basic infrastructure. Electric power was down for weeks and months with multi-state outages and rolling blackouts on the east coast. Memphis had no drinking water. Its aquifer was 300 feet below ground and its electric pumps ran on limited back-up generator capacity. With no water pressure, no means existed to combat urban fires fed by broken gas lines. Public health and safety threats merged in an environment where hospitals ceased operations after their back-up generators exhausted their 48-hour fuel capacity. Calls to commercial fuel providers

¹ Federal Emergency Management Agency, "National Level Exercise 2011 (NLE 11) Functional Exercise", Draft After Action Report, 15 July 2011, 14.

² FEMA, "NLE 11," 38.

³ FEMA, "NLE 11," 36.

⁴ FEMA, "NLE 11," 39.

were unanswered since no national prioritized plan for fuel distribution for back-up generators existed.

Every ounce of fuel needed for response efforts was flown or trucked to incident sites. Gas pumps were useless with no electricity to operate them. By the third day, there were over 1.2 million gallons of fuel requests daily, with 73 percent for diesel fuel and 27 percent for motor gasoline. Three weeks following the event, fuel shortages exceeded 500,000 gallons a day.⁵

Joint Reception, Staging, Onward Movement and Integration (JROSI) was a challenge. The lack of power forced local gas facilities offline, crippling efforts to receive, stage, and move forces forward for response and recovery efforts. Memphis International airport was an excellent JROSI facility but power outages eliminated it from consideration.

Fortunately, this terrible event never took place. National Level Exercise 2011 (NLE 11) was a White House directed, congressionally mandated exercise addressing a catastrophic earthquake in the NMSZ. Eight states and four Federal Emergency Management Agency (FEMA) regions participated as did federal, regional, state, tribal, local, and private sector participants. More than 17 governmental agencies took part in addition to 18,000 Department of Defense (DOD) personnel.⁶

Known as a complex catastrophe, the potential size and destructive capacity of the NMSZ event is startling. Complex catastrophes differ both quantitatively and qualitatively from normal disasters. Quantitatively, they are significantly larger in scale and magnitude. Estimates for eight states in the NMSZ earthquake scenario suggest that 7.2 million people would be at risk in the first three days, 700,000 buildings damaged, 2.6 million people without power, 83,000 injured, 20,000 victims requiring hospitalization, 3,500 fatalities, and 132 damaged or destroyed hospitals.⁷

Qualitatively, complex catastrophes create cascading effects on critical infrastructure that complicate response efforts. For the NMSZ, the power, natural gas,

⁵ FEMA, "NLE 11," 41.

⁶ National Guard Bureau J3/7 Lessons Learned Branch, "National Guard Bureau After Action Report, National Level Exercise (NLE) 2011," 3 August 2011, 3.

⁷ Dr. Paul Stockton, Assistant Secretary of Defense Homeland Defense & Americas' Security Affairs (address, Domestic Preparedness Workshop, National Harbor, Maryland, 22 February 2012).

and water would be out for months causing numerous secondary emergencies. Hospitals and emergency medical services would be inoperable due to an inability to operate backup generators. Ruptured dams, levees, and natural gas lines would cause fires and floods. Gasoline and diesel fuel would become a critical commodity due to the inability to pump fuel, causing backup generators to fail across the board.⁸

For a frame of reference, consider Hurricane Katrina. Katrina affected the coastal area of three states, forced 1.2 million people to evacuate; damaged 300,000 buildings; left 1.7 million without power; resulted in 17,000 reported injuries, 1,800 fatalities, and 30 hospitals closed. For Hurricane Katrina, 85 percent of the population had power restored in two weeks. Communications, water, and sewage were out for weeks. Secondary emergencies were limited to flooding caused by levee failure, public safety caused by looting, and hazardous material due to oil spills.⁹

NLE 11 was not an outlier scenario. Recent real-world events provide a continuous reminder of the value of exercises of this scope. Devastating earthquakes in Haiti, Chile, and Japan illustrated vividly and tragically the human, economic, and social impact of such a catastrophic disaster, and underscored the importance of enhancing preparedness for such an event in the US.¹⁰

Cognizant of the threat complex catastrophes pose to national resilience, the President directed the National Security Staff to examine homeland security strategies to determine what constituted national preparedness. The result was Presidential Policy Directive (PPD-8) National Preparedness. The President directed the Department of Homeland Security, FEMA, and supporting agencies to define national preparedness, build frameworks to support preparedness, and examine how the nation may respond collectively in a whole of community approach.

FEMA Administrator Craig Fugate's comments at the National Guard's 2012 Domestic Preparedness Workshop highlighted the philosophical difference of PPD-8. In the past, the belief was the federal government would take care of everything. Now, everyone involved, from the local, state, and federal levels, must determine a way to respond and stabilize affected communities with what they already have. This means

⁸ Stockton, Domestic Preparedness Workshop address.

⁹ Stockton, Domestic Preparedness Workshop address.

¹⁰ FEMA, "NLE 11," 6.

reaching across lines and using resources collectively. Instead of relying on federal funding to build local capacity, shareholders must think of how their capability fits into national capability. National capability is comprised of discrete building blocks with unique and specialized capabilities, has many mission sets, and is multi-purpose that can be applied against a problem.¹¹ In short, local, state, and federal entities must determine what they do best rather than trying to do everything, and focus on how that may be harnessed for the collective good.¹²

Instead of doing everything, federal entities must now focus on setting the stage for response and recovery success. This means showing up and providing a safe and secure environment for local, state, and private sector partnerships to work effectively. Following a catastrophic event, local responders in the state will be stretched to their breaking point. However, the larger federal response cannot make an impact until it arrives. That means arriving quickly. Additionally, if the government cannot get the resources there to provide a sense of security and re-assure the public, little else happens. In order to do this, federal relief efforts must “go fast, go big, go early, and above all, go smart.”¹³

The ramifications of PPD-8 extend to the Department of Defense as well. Department of Defense Directive (DODD) 3025.18, *Defense Support Civil Authorities (DSCA)*, stipulates that DOD, to include National Guard forces, when coordinated by governors of the affected States, and the Secretary of Defense (SECDEF) can respond to requests for assistance from civil authorities for domestic emergencies, law enforcement support, and other domestic activities.¹⁴ In response to PPD-8, the Secretary of Defense, in a memorandum dated 23 Jan 2012 stated, “in a domestic complex catastrophe, one who’s effects would qualitatively and quantitatively exceed those experienced to date, the demand for DOD support of civil authorities would be unprecedented. The DOD must be ready to meet the demand to save and protect lives and must do so in ways that would not require additional force structure.”¹⁵ Consequently, the SECDEF asked Dr. Paul

¹¹ Craig Fugate, Administrator of the Federal Emergency Management Agency, (address, Domestic Preparedness Workshop, National Harbor, Maryland, 23 February 2012).

¹² Fugate, Domestic Preparedness Workshop address.

¹³ Fugate, Domestic Preparedness Workshop address.

¹⁴ DOD Directive (DODD) 3025.18, *Defense Support of Civil Authorities*, 29 December 2010, 16.

¹⁵ Stockton, Domestic Preparedness Workshop address.

Stockton, Assistant Secretary of Defense Homeland Defense and America's Security Affairs, to develop recommendations to improve DOD support of civil authorities during a complex catastrophe, without additional force structure.

In his remarks at the National Guard's 2012 Domestic Preparedness Workshop, Dr. Stockton said DOD must focus on strengthening unity of effort.¹⁶ The demand-pull for National Guard forces in State Active-Duty (SAD) through the Emergency Management Assistance Compact (EMAC), and governor requests for federal military assistance would be vastly larger in a complex catastrophe. Hurricane Katrina highlighted the need to coordinate federal and state military forces. Should that coordination fail, current lines of effort will fall short in terms of bringing DOD capabilities to bear to save and sustain lives in the first hours following an incident. Since there is no additional force structure in the current budget environment, the DOD must develop better means to bring their forces to bear in a timely fashion should governors ask for support.¹⁷

Secondly, the DOD must leverage existing immediate response authority so continental United States (CONUS) forces and facilities may be used regardless of what their primary purpose is if directed by the president to save American lives. Time, distance, and fit of capability to need should be the driving force under the DSCA execution order (EXORD). Bases across the nation are amply prepared to deal with disasters in their communities. They have liaison agreements, plans with the local first responder community, and emergency managers to provide support right outside the gates. However, bases have yet to think about providing capability 200-300 miles away where they may be best positioned to save and sustain lives. While they are great right outside the gate, they are not thinking in terms of their FEMA region nor have they been asked.

The Air National Guard

When Hurricane Katrina made landfall on August 29, 2005, the Air National Guard (ANG) faced the largest natural disaster in its 60-year existence.¹⁸ Air Guard

¹⁶ Stockton, Domestic Preparedness Workshop address.

¹⁷ Stockton, Domestic Preparedness Workshop address.

¹⁸ Susan Rosenfield and Charles J. Gross, *Air National Guard at 60: A History*, (Washington DC: Air National Guard History Office, 2008), 59.

personnel from all 54 states and territories participated in Katrina recovery efforts.¹⁹ Guard aircraft flew 73 percent of the airlift for relief operations.²⁰ Over 3,000 sorties moved more than 30,000 passengers and 11,000 tons of supplies throughout the Gulf Coast region. Guard Combat Controllers and Pararescuemen rescued over 1,400 people.²¹ Air Guard medical units at eight different Gulf Coast locations treated over 15,000 patients.²² At the height of military response activities, 50,000 National Guard (NG) personnel (Air and Army) and 20,000 federal military personnel supported an unprecedented domestic mobilization.²³

The Air Guard's role in civil support goes back to 1927, when the governor of Arkansas tasked the 154th Observation Squadron, Arkansas National Guard, with rescue and relief efforts during the 1927 Mississippi River flood.²⁴ Since then, when not directly supporting the Air Force, the ANG in accordance with state laws, protects life and property and preserves peace, order, and public safety through emergency relief support during natural disasters, search and rescue operations, and support of civil authorities.²⁵

Today, governors routinely enlist air guard personnel for civil support operations. In 2011, over 6,000 ANG personnel participated in Hurricane Irene response efforts.²⁶ This was simply one out of 20 other events, from flood and tornado response efforts to fighting wildfires, in which ANG personnel took part.²⁷ History suggests the Air Guard will continue to participate in domestic civil support operations. Since 1992, on average, Air Guard personnel worked an equivalent of approximately 300,000 man-days a year in support of civil support operations.²⁸

¹⁹ Rosenfield and Gross, *Air National Guard at 60*, 60.

²⁰ Rosenfield and Gross, *Air National Guard at 60*, 60.

²¹ Rosenfield and Gross, *Air National Guard at 60*, i.

²² Rosenfield and Gross, *Air National Guard at 60*, i.

²³ Government Accountability Office, *Hurricane Katrina: Better Plans and Exercises Need to Guide the Military's Response to Catastrophic Natural Disasters* (Washington DC: Government Printing Office, 25 May 2006), 6.

²⁴ Rosenfield and Gross, *Air National Guard at 60*, 6.

²⁵ Department of Defense, *National Guard and Reserve Equipment Report for FY 2012* (Washington, DC: Government Printing Office, 2011), 1-17.

²⁶ Ken Franklin (Senior Advisor, National Guard Civil Support (NGCS) Requirements Planning, National Guard Bureau/A7), interview by the author, 24 February 2012.

²⁷ Franklin, interview by the author, 24 February 2012.

²⁸ Air National Guard, "Report on Air National Guard Catastrophic Events, Disaster Costs & Man-days," 20 February 2012.

While the ANG maintains a dual mission capability to support both overseas and domestic operations, Hurricane Katrina marked an evolution in the ANG's role in domestic operations. Katrina response efforts highlighted the depth of resources and dual use capabilities inherent in the ANG. By spanning the breadth of the Gulf Coast, the ANG proved capable of tackling a regional crisis, one approaching the scale of a complex catastrophe, while still honoring its overseas war fighting commitments.

Problem

The ANG's inherent dual use role, civil support lineage, and geographical dispersion throughout the 54 states and territories suggest the ANG can play a role in combating the effects of a complex catastrophe. How can the ANG provide support in a complex catastrophe?

Scope

This monograph focuses on the ANG's role in support of complex catastrophes, vice the National Guard (NG) en masse. While the Army National Guard, due to their sheer manpower advantage, possesses significant civil support capabilities, the ANG remains the focus.

Significance

Presidential Policy Directive-8 calls for a whole community approach integrating efforts across federal, state, local, tribal, and territorial governments and with private sector, community, non-governmental, and individual partners. As a key component to state and federal domestic operations, the ANG has a critical role to play in disaster response. Consequently, the Air Guard must work efficiently and effectively with federal, state, and local entities.

Research Question

Can the ANG go fast, go big, go early, and go smart in a complex catastrophe? In other words, can the ANG respond quickly and efficiently with adequate capacity in a timely manner to save and sustain lives?

Supporting Questions

This monograph will address a number of supporting questions. FEMA Administrator Craig Fugate suggested PPD-8 shareholders focus on what they do well and apply those capabilities across many mission sets. Consequently, this monograph examines four areas. First, does the ANG possess unique and specialized capabilities, capable of spanning many missions, and are multi-purpose. Second, can the ANG arrive quickly and provide a safe and secure environment for local, state, and private sector partnerships to work effectively. Third, where should the ANG reside in an integrated DOD wide effort to bring forces to bear in a timely fashion, should governors ask for support. Lastly, can the ANG leverage its capabilities across FEMA regions vice simply in and around local bases.

Body

Chapter 1 is a foundation chapter devoted to establishing a firm understanding of the many parts inherent to military civil support operations. It comprises two sections. The first section provides background specific to Defense Support of Civil Authorities (DSCA) and National Guard Civil Support (NGCS) to include legal, doctrinal, and policy issues, as well as an overview of the incident management system. Section two examines civilian and military responses to a natural disaster. Also included are the organization and command relationships involved in the DOD's response to a disaster. This chapter illuminates the procedural and policy boundaries within which the ANG must operate in order to save and sustain lives.

Chapter 2 addresses the "go fast and go smart" aspect of the thesis. It explicates PPD-8, defines national preparedness and the five mission areas integral to national preparedness, examines requisite FEMA core capabilities, and, in an effort to assess the ANG's civil support capabilities in the aggregate, ties Unit Type Codes (UTCs) and personnel numbers to national preparedness core capabilities, FEMA regions, and ESFs. The intent is threefold. First, determine how closely ANG civil support capabilities align to national preparedness core capabilities and fit within the NRF. Second, examine ANG capability dispersion amongst FEMA regions to determine the ANG's capacity to engage

in civil support events beyond local bases. Lastly, examine how ANG personnel and material align with ESFs to determine the ANG's unique and national capabilities.

Analysis suggests three things. First, the ANG is comprised of discrete building blocks with unique and specialized capabilities. Second, ANG mission sets are multi-purpose and represent a national capability well adapted to the complex catastrophic environment. Finally, the manner in which ANG capabilities are dispersed within each FEMA region allows for greater flexibility and reduced response timelines since a wider variety of forces and facilities are available for use. The cumulative effect suggests the ANG is structured to arrive quickly and provide a safe and secure environment for local, state, and private sector partnerships to work effectively in order to save and sustain lives.

Chapter 3 addresses the capacity question, or the "go big," portion of the thesis. It disaggregates UTCs and personnel into their holistic working groups. ANG airlift, search and rescue, medical, communications, civil engineering, and incident awareness and their embedded capabilities are examined to determine their requisite strengths and weaknesses as well as whether they can provide a safe and secure environment for local, state, and private sector partnerships to work effectively in a cascading complex catastrophe environment. Analysis suggests these groups represent national capability comprised of discrete building blocks with unique and specialized attributes. They span many mission sets, are multi-purpose, and can be applied against a complex catastrophic problem to save and sustain lives.

Chapter 4 addresses the "go smart" aspect of the thesis. Specifically can the ANG effectively and efficiently integrate its national capabilities on the scale required in a complex catastrophe? Can the ANG provide a safe and secure environment for local, state, and private sector partnerships to work effectively? It examines the results and implications of NLE 11 and its subordinate exercises, National Guard Bureau NLE 11 and Ardent Sentry 11. Analysis suggests the ANG cannot "go smart" in a complex catastrophe. Chapter 4 proposes how the ANG can strengthen its role in responding to complex catastrophes. Furthermore, it suggests the method by which ANG forces are integrated into DOD wide efforts is faulty and offers recommendations to rectify weaknesses in sourcing and funding in order to strengthen unity of effort.

Chapter 1

Foundation

This chapter is devoted to establishing a firm understanding of the many parts inherent to military civil support operations. It comprises two sections. The first section provides background specific to Defense Support of Civil Authorities (DSCA) and National Guard Civil Support (NGCS) to include legal, doctrinal, and policy issues and an overview of the incident management system. Section two examines civilian and military responses to a natural disaster. Also included are the organization and command relationships involved in the DOD's response to a disaster.

DSCA and NGCS

Every year citizens of the United States are threatened with loss of life and property as the result of natural disasters. Between 2000 and 2008, natural disasters resulted in 426 Presidential Disaster Declarations, an average of four per month.¹ In 2011, the nation suffered \$14 billion in natural disasters. Hurricane Irene was the most memorable and the most decisive and resulted in extensive damage along the east coast, widespread destruction, and at least 56 deaths.² Twenty-seven states in the National Guard (NG) supported Hurricane Irene response efforts.³ National Guard units, under control of their respective state governors, traditionally are the primary military responders to domestic natural disasters. Federal forces are called upon after state resources are exhausted or overwhelmed, or a specific capability is otherwise unavailable and the governor requests federal assistance.

Air National Guard forces respond to domestic disasters along a continuum of capability, beginning with NGSC and extending through DSCA. National Guard Regulation (NGR) 500-1/ANG Instruction (ANGI) 10-8101 defines NGCS as "support provided by the National Guard of the several states while in state active-duty status or Title 32 duty status to civil authorities for domestic emergencies, and for designated law

¹ Ken Franklin, interview by the author, 24 February 2012.

² Gen Craig R. McKinley, Chief, National Guard Bureau (address, Domestic Preparedness Workshop, National Harbor, Maryland, 22 February 2012).

³ McKinley, address Domestic Preparedness Workshop, 22 February 2012.

enforcement and other activities.⁴ ANG forces normally serve in a supporting role to other primary state or federal agencies by assisting US civil authorities at the federal, state, territory, tribal, and local levels.⁵ The primary responsibility for disaster relief remains with local and/or state government. Due to the local nature of most disasters, disaster responses and domestic emergencies, NGCS operates under the guidance and direction of the Governor, thereby retaining ANG personnel under state control (either state active-duty or Title 32 duty status).⁶

Disaster response and domestic emergency missions focus on providing humanitarian support. While some generalized deliberate planning and preparation is possible, conditions often dictate an immediate response with minimal preparation or planning time available. Some specialized National Guard units and capabilities are utilized for disaster response and domestic emergency missions, however, the bulk of the forces and units employed are general-purpose forces. Air Guard disaster response and domestic emergency missions typically last a matter of days or weeks.⁷

On the other end of the spectrum is DSCA. DSCA is a federal mission and defined as “support provided by U.S. Federal military forces, DOD civilians, DOD contract personnel, DOD Component assets, and National Guard forces (when the Secretary of Defense, in coordination with the Governors of the affected States, elects and requests to use those forces in title 32, U.S.C., status) in response to requests for assistance from civil authorities for domestic emergencies, law enforcement support, and other domestic activities, or from qualifying entities for special events. Also known as civil support.”⁸ Civil support is defined as “Department of Defense support to US civil authorities for domestic emergencies, and for designated law enforcement and other activities.”⁹ DCSA events typically include hurricane response efforts and events regional in nature. A complex catastrophe falls into the DSCA purview.

⁴ National Guard Regulation (NGR) 500-1/ANG Instruction (ANGI) 10-8101, *National Guard Domestic Operations*, 13 June 2008, 5.

⁵ *National Guard Domestic Operations*, 5.

⁶ *National Guard Domestic Operations*, 6.

⁷ *National Guard Domestic Operations*, 6.

⁸ *Defense Support of Civil Authorities*, 16.

⁹ Joint Publication JP 3-28, *Civil Support*, 14 September 2007, GL-6.

Due to military readiness requirements, military personnel can respond rapidly to a broad spectrum of emergencies. Additionally, since military personnel and associated equipment are effectively employed in civil support operations, civil authorities will continue to call upon the military for assistance.

Duty Status

The unique dual-status of the ANG allows it the ability to span both state and federal missions. This allows the ANG to respond to domestic emergencies and participate in federally directed overseas contingency operations. Dual status is based in Article I, Section 8 of the Constitution.¹⁰ Consequently, each Guardsman is a member of the Air National Guard of their state, for their state role and missions, and in the Air National Guard of the United States for their federal role and missions.¹¹ Because of this, ANG personnel are members of two organizations: the air component of their respective state's organized militia and the reserve component of the United States Air Force.

Interpreting controlling authority is critical to understanding the nuances of DSCA and NGCS. Controlling authority directly affects mission sets, command and control, funding, and ultimately organization readiness. ANG members may operate in three different statuses while performing military duties: State Active Duty (SAD), Title 32, or Title 10 of the US Code.

State active duty is when ANG personnel and equipment remain accessible to their governor for state or local emergencies, unless otherwise provided by law. States are free to employ their NG forces under state control for state purposes and at state expense as provided for under state law.¹² Command and control rests solely with the Governor as head of the state government and that state government bears all of the associated costs. Execution of state active-duty missions occurs by delegating authority from the governor to the adjutant general (TAG). In state active-duty status, the guardsman has no operational connection to the federal government.

¹⁰ U.S. Const. art. I, § 8 for references to the militia. The Constitution empowered Congress to “provide for organizing, arming, and disciplining the militia.” However, recognizing the militia's state role, the Founding Fathers reserved the appointment of officers and training of the militia to the states. Today's National Guard remains a dual state-federal force.

¹¹ *National Guard Domestic Operations*, 3.

¹² 10 U.S.C. § 10107, 10113.

The next type of status is when a guardsman operates under Title 32 duty status.¹³ The ANG typically performs training for its federal wartime missions in Title 32 duty status.¹⁴ Occasionally they perform operational missions in Title 32 status as allowable under 32U.S.C. 502(f).¹⁵ While individual states control NG units operating in Title 32 duty status, they remain federally funded.¹⁶ For example, over 1,700 ANG personnel operated under section 502(f) authority while responding to the Deepwater Horizon oil spill in 2011.¹⁷ The ability to operate in the service of the federal government while under state control is unique to the National Guard. In all cases, the governor maintains command and control of NG forces in Title 32 duty status. National Guard members performing this duty are in a state duty status and serve in Title 32 duty status.

The third status a guardsman can serve is under Title 10. Title 10 forces are regular Army, Navy, Marine, and Air Force personnel, but also include mobilized Army, Navy, Air Force, and Marine Reserve forces, and any NG forces mobilized for federal service.¹⁸ The President of the United States is the Commander-in-Chief of NG forces, vice the respective governors. When mobilized for federal service, air guard personnel serve in the Air National Guard of the United States, which is a part of the Air Reserve Component (ARC).¹⁹ Both the ANG and Air Force Reserve comprise the ARC.²⁰ Consequently, the Air Force consists of both the active component and reserve component.

Depending upon the scope of the event, DSCA may be controlled by the affected governor, coordinated through FEMA, and supported by DOD or ultimately federally controlled by the President through his geographic combatant command. The President may, in accordance with the Insurrection Act as amended in 2007, use the National Guard to restore order and enforce laws in response to a natural disaster.²¹ Consequently, ANG forces would operate in Title 10 status. An event the size of a complex catastrophe

¹³ Timothy J Lowenburg, "The Role of the National Guard in National Defense and Homeland Security," *National Guard*; Sep 2005; 97.

¹⁴ 32 U.S.C. § 502.

¹⁵ 32 U.S.C. § 901.

¹⁶ 32 U.S.C. § 502.

¹⁷ Franklin, interview by the author, 24 February 2012.

¹⁸ Lowenburg, "The Role of the National Guard in National Defense and Homeland Security," 98.

¹⁹ 10 U.S.C. § 10102.

²⁰ 32 U.S.C. § 101.

²¹ 10 U.S.C. §§ 331-335.

would extend into federal control. In response to DSCA, expectations of DOD capabilities must be effectively managed and communicated. The goal is efficient execution of relief operations and successful synchronization of military and civil capabilities after a disaster when local and state level infrastructure may be overwhelmed. Figure 1 summarizes the statuses and controlling authorities associated with NGSC and DSCA.

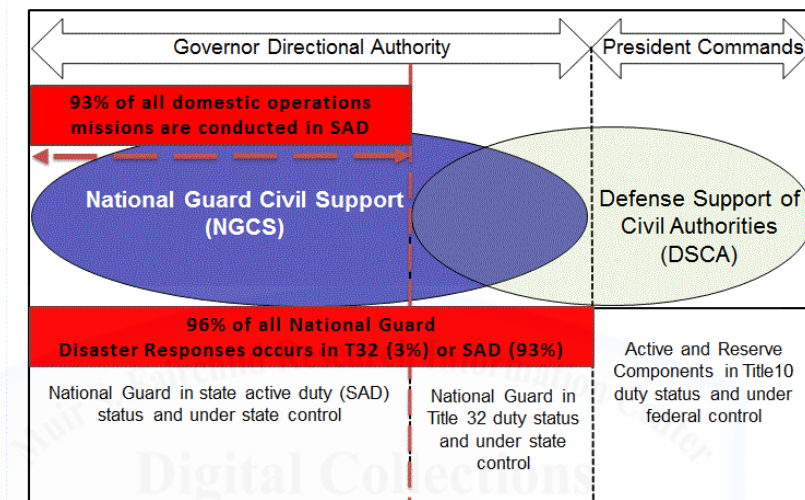


Figure 1: National Guard Civil Support and Defense Support Civil Authorities Summary

Source: Ken Franklin, Senior Advisor, National Guard Civil Support (NGCS) Requirements Planning, National Guard Bureau/A7

Disaster Response Apparatus and Policy Actions

The Federal Emergency Management Agency (FEMA), under the direction of the Department of Homeland Security (DHS), is the Primary Agency (PA) in the federal response to natural disasters.²² DOD resources, thru coordination with FEMA, may be requested to augment local, state, and federal capabilities in assisting with a state-led response. However, the DOD does not provide the majority of support. The expectation is the DOD will be the last in and the first out. While replete with manpower and

²² Executive Order 12127, Federal Emergency Management Agency, 31 March 1979.

resources, the DOD's focus remains primarily on countering violent extremism and deterring and defeating aggression and less so on civil support operations.²³

FEMA is organized into ten regions. Each region serves as the focal point for organizing and coordinating state and federal emergency management.²⁴ The primary mechanism in which FEMA, state and federal agencies organize and provide assistance are Emergency Support Functions (ESFs).²⁵ ESFs are organized into fifteen functional areas. They may be selectively activated for both Stafford Act and non-Stafford Act incidents and are assigned to support headquarters, regional, and field activities.

The cascading effects inherent in a complex catastrophe require the President invoke the Stafford Act. The Robert T. Stafford Disaster Relief and Emergency Assistance Act, which spells out how the federal government will assist states in times of crisis, allows the President to issue major disaster or emergency declarations in response to catastrophes that overwhelm state and local governments.²⁶

Another policy allowing for ANG assistance during a complex catastrophe is the Posse Comitatus Act (PCA). Posse Comitatus was passed in 1878 to limit law enforcement personnel from utilizing the federal military to enforce the laws of the land.²⁷ However, ANG forces operating in state active-duty or Title 32 status are under no such restriction.²⁸ Unlike Title 10 forces, ANG security forces, under Title 32 or in state active-duty, may augment or direct law enforcement activities in areas completely devoid of police or security, such as in an environment suffering the effects of a complex catastrophe.

Every responding entity, whether local, state, and federal, their associated employment mechanisms (NGCS, DSCA), and policy vehicles (Stafford Act) must operate in accordance with a framework to ensure an efficient use of resources and unity of purpose. To do so, the Department of Homeland Security (DHS), through FEMA, established the National Incident Management System (NIMS) and National Response

²³ The National Military Strategy of the United States, 2011, 10.

²⁴ FEMA, "Regional Operations," <http://www.fema.gov/about/regions/index.shtm> (accessed 3 May 2012).

²⁵ Homeland Security, "Overview: ESF and Support Annexes Coordinating Federal Assistance In support of the National Response Framework," January 2008, 11.

²⁶ 42 U.S.C. § 5170, 5191.

²⁷ 18 U.S.C. § 1385.

²⁸ 10 U.S.C. § 375.

Framework (NRF).²⁹ The NRF outlines how the federal government coordinates with state, territory, local, and tribal governments and the private sector during incidents. The ANG considers the NRF and NIMS in the planning and conduct of domestic operations.³⁰ NIMS establishes a nationwide approach for federal, state, tribal, and local governments to work together to mitigate domestic incidents.³¹ The NIMS framework forms the basis for interoperability and compatibility thus enabling public and private organizations the means to conduct integrated and effective incident management operations.³²

Civilian and Military Responses to Natural Disasters

First responders, local emergency and public works personnel are the first tier in the incident management process. The most experienced of these personnel will take command as the Incident Commander. This person will remain the Incident Commander unless a more qualified individual replaces him or her. First responders may turn to county emergency managers located at the Emergency Operations Center in the event additional assistance is required.³³ In turn, Emergency Operations Center can call on additional assets from throughout the county for greater assistance.

When local jurisdictions cannot contain the incident, the governor can declare a state of emergency and invoke the state's emergency plan to augment individual and public resources as required. Each state's emergency plan mandates every county and municipal government develop and maintain an emergency management program consistent with the state and federal emergency management program. Under the Stafford Act, states are also responsible for requesting federal emergency assistance for community governments within their jurisdiction.³⁴

As the effects of the incident become more widespread, the State Coordinating Officer assumes a larger role. The State Coordinating Officer is the governor's representative responsible for directing statewide response efforts as well as coordinating state disaster efforts with the federal government. The State Coordinating Officer will

²⁹ Homeland Security, "National Response Framework," January 2008, 1.

³⁰ *National Guard Domestic Operations*, 9.

³¹ Homeland Security, "National Incident Management System," December 2008, 1.

³² *National Guard Domestic Operations*, 9.

³³ "National Incident Management System," December 2008, 62.

³⁴ 42 U.S.C. §§ 5121-5206.

work with the Federal Coordinating Officer, to formulate state requirements, including those beyond state capability.³⁵

In the event statewide capabilities are exhausted, the governor can use Emergency Management Assistance Compact (EMAC) agreements to request resources from other states.³⁶ An EMAC allows states to provide mutual aid by sharing resources across state lines.³⁷ EMACs can be used in lieu of or in conjunction with federal assistance. The state requesting assistance through an EMAC is responsible for reimbursing the supporting state.³⁸ All states, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands are members of EMAC. Actual or potential widespread disasters affecting multiple states can exhaust EMACs thus requiring urgent requests for federal assistance.

State Military Response

The NG is the first military response to most incidents. They work with civilian emergency management personnel and first responders. NG forces mobilized by the governor operate under state active-duty authority and are commanded by the governor. State active duty authority operates in accordance with state laws and statutes.

National Guard personnel work through their respective Joint Force Headquarters (JFHQ). Each state has a JFHQ that provides command and control of all Army and Air National Guard forces and state militia.³⁹ The JFHQ serves as the focal point for all National Guard domestic operations within each state. When National Guard forces conduct domestic operations support in Title 32 or state active-duty, JFHQ-States have the capability to serve as an operational headquarters.

In the event an affected state requires National Guard support over and above their resident capabilities, they may request additional resources through an Emergency Management Assistance Compact (EMAC). National Guard personnel sent by one state to another remain in state active-duty status unless the SECDEF approves Title 32 status.

³⁵ Homeland Security, "Joint Field Office Activation and Operations," April 2006, 9.

³⁶ FEMA, "Emergency Management Assistance Compact (EMAC)," <http://www.fema.gov/pdf/emergency/nrf/EMACOverviewForNRF.pdf> (accessed 1 May 2012), 1.

³⁷ FEMA, "EMAC," 1.

³⁸ FEMA, "EMAC," 1.

³⁹ DOD Directive (DODD) 5105.83, *National Guard Joint Force Headquarters-State (NG JFHQ-State)*, 5 January 2011, 7.

The supported state is responsible to the supporting states for the costs of these personnel. An EMAC allows the states to rely upon each other in responding to, among other things, emergencies such as man-made or natural disasters.⁴⁰ In situations where multiple states are affected by widespread disasters, EMACs may become quickly exhausted requiring an urgent request for federal response.

Federal Response

A presidential declaration in accordance with the Stafford Act permits the flow of federal resources, to include DOD resources, to provide assistance to a state.⁴¹ DOD can support civil authorities upon request and approval by the SECDEF or President through DSCA.⁴² However, DOD may provide assistance without SECDEF approval in a number of instances: Immediate Response Authority (IRA), Mutual Aid Agreements/Memoranda of Agreement (MOAs), and Memoranda of Understanding (MOUs).⁴³

Under Immediate Response Authority, any commander can provide resources to save lives, prevent suffering, and mitigate great property damage.⁴⁴ However, a 72-hour time limit exists for immediate response operations.⁴⁵ Beyond 72-hours, the belief is sufficient time has expired to allow follow on resources to take over, thus absolving DOD of the responsibility of remaining. DOD Immediate Response Authority does not apply to guardsman in state active-duty status. Those forces receive their authority to conduct immediate response from state law.

The order delineating how DOD resources are allocated in support of DSCA is the DSCA Execution Order (EXORD). This EXORD provides the supported Combatant Commander the resources and authorities to conduct DSCA operations. Authorities fall

⁴⁰ *National Guard Domestic Operations*, 10.

⁴¹ 42 U.S.C. § 5170(a).

⁴² DOD Directive (DODD) 3025.18, *Defense Support of Civil Authorities (DSCA)*, 29 December 2010, 3.

⁴³ *Defense Support of Civil Authorities (DSCA)*, 4.

⁴⁴ *Defense Support of Civil Authorities (DSCA)*, 4.

⁴⁵ *Defense Support of Civil Authorities (DSCA)*, 5.

into four categories of authorization: assigned forces, pre-identified resources, resources for internal use, and large-scale response categories.⁴⁶

Three combatant commands are the DOD's regional planning agents for DSCA.⁴⁷ United States Northern Command is responsible for the continental US. US Army North (USARNORTH) is the Joint Force Land Component Commander. First Air Force, Air Forces Northern (AFNORTH), typically acts as USNORTHCOM's Joint Force Air Component Commander.⁴⁸ United States Pacific Command provides support for Hawaii, Guam, the Commonwealth of the Northern Mariana Islands, and American Samoa.⁴⁹ United States Southern Command retains responsibility for Puerto Rico and the Virgin Islands.

In the event FEMA cannot fill a state's resource request internally, FEMA will coordinate with other federal agencies for support. FEMA coordination for DOD capabilities occurs at the respective combatant command. In this instance, FEMA will issue a Request for Assistance (RFA) or Mission Assignment (MA) to the combatant command to fill a requirement. A disaster the size of a complex catastrophe will stress the RFA/MA process to the breaking point. In recognition of this, FEMA reserves the right to act unilaterally without the consent of the governor where rapid response is critical and in circumstances necessary to save lives or mitigate severe damage.⁵⁰

The affected combatant command exercises operational control (OPCON) of DOD resources sourced to fill the requested mission assignment. Consequently, those forces fall under Title 10 authority. Upon arrival, the Joint Task Force Commander or Joint Force Commander assumes tactical control (TACON) of selected DOD resources.

The size of the response may dictate military forces operating in varying statuses. Dual status command permits a designated National Guard or federal military officer to command military personnel serving in state active-duty, Title 32, or Title 10 status.⁵¹

⁴⁶ Department of Defense, eds., *DSCA Handbook, Defense Support of Civil Authorities Handbook: Tactical Level Commanders and Staffs Toolkit, Liaison Officer Toolkit On Back Cover*, 30 July 2010 (United States Dept. of Defense, 2010), 3-5.

⁴⁷ *DSCA Handbook*, 3-11.

⁴⁸ *DSCA Handbook*, 3-11.

⁴⁹ *DSCA Handbook*, 3-13.

⁵⁰ FEMA, *Disaster Operations Legal Reference*, Version 1.0 (Washington, DC: Government Printing Office, 1 November 2011), 4-68.

⁵¹ 32 U.S.C. § 325.

This dual status relationship ensures a unity of effort between state and federal military forces in accordance with guidance from both the President and respective governor.⁵²

Summary

This chapter defined NGSC and DSCA and explained the legal, doctrinal, and policy issues relevant to the ANG's role in civil support operations. Furthermore, NIMS and NRF were discussed to show the mechanism the ANG adheres to with respect to civil support planning. Lastly, the civilian and military response mechanisms for natural disasters, as well as command relationships, were explained to provide a common frame of understanding. This chapter illuminated the procedural and policy boundaries within which the ANG must operate. They are the framework and constraints the ANG must maneuver to save and sustain lives. Chapter 1 provided the framework for the ANG to "go fast, go big, go early, and go smart." Chapter 2 examines how the ANG may "go fast and go smart."



⁵² DOD Directive (DODD) 5105.83, *National Guard Joint Force Headquarters – State (NG JFHQs-State)*, 5 January 2011, 12.

Chapter 2

Unique Capabilities

Chapter 2 addresses the “go fast and go smart” aspect of the thesis. It doing so, it expounds on PPD-8, defines national preparedness, examines requisite FEMA core capabilities, and, in an effort to assess the ANG’s civil support capabilities in the aggregate, ties Unit Type Codes (UTCs) and personnel numbers to national preparedness core capabilities, FEMA regions, and ESFs. If the National Preparedness System is the method the US uses to build, sustain, and deliver core capabilities, and national preparedness is a responsibility shared by federal, state, and local entities, and the ANG fills both federal and state roles, then measuring ANG capabilities against national preparedness core capabilities is an appropriate assessment tool. The intent is threefold. First, to determine what the ANG’s unique and specialized capabilities are and how they correlate to national preparedness core capabilities. Second, to examine how ANG capabilities vary according to FEMA regions and see if they constitute forces and resources available for use in civil support events beyond local bases, regardless of their primary purpose. Lastly, to identify what ANG mission sets are multipurpose and represent national capability. These determinations inform how effectively the ANG can respond quickly and efficiently with adequate capacity in a timely manner to save and sustain lives.

ANG UTCs vs. Core Capabilities

PPD-8 describes the nation’s approach to preparing for threats and hazards that pose the greatest risk to national security. The National Preparedness System is the instrument the US employs to build, sustain, and deliver core capabilities to achieve a secure and resilient country.¹ National preparedness is the shared responsibility of the whole community to include individuals, communities, the private and nonprofit sectors, faith-based organizations, and Federal, state, and local governments. Core capabilities provide the backbone for a security and resilience posture capable of dealing with great risks. The National Preparedness Goal is defined as a “secure and resilient Nation with

¹ Homeland Security, *National Preparedness System* (Washington DC: Government Printing Office, November 2011), 1.

the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk”.²

PPD-8 directs an integrated, layered, and all-of-nation approach for national preparedness in five mission areas.³ Prevention requires avoiding or stopping a threat or act of terrorism. Protection requires protecting citizens, residents, visitors, and infrastructure against threats and hazards and allows US interests, aspirations, and way of life to thrive. Mitigation requires guarding against the loss of life and property by reducing the impact of future disasters. Disaster response means responding quickly to save lives, protect property and the environment, and meet basic human needs following a catastrophic incident. Recovery takes place by focusing on timely restoration, strengthening, and revitalization of infrastructure, housing, and economy.⁴

Core capabilities are the means by which communities and agencies may achieve the National Preparedness Goal.⁵ Every core capability within each mission area includes associated performance thresholds to guide resource allocation in support of national preparedness.⁶ Additionally, each core capability includes capability targets to assess both capacity and gaps. The core capabilities and capability targets require the combined efforts of the whole community rather than any single level of government or organization.⁷

Response and recovery mission areas go further by focusing on a set of core capabilities based on the impact of a no-notice, cascading incident. Such an incident would likely stress national capabilities.⁸ Planning factors, drawn from a large-scale earthquake, major hurricanes, and WMD attack, were developed to mimic a cascading incident in order to identify the requisite core capabilities.⁹

The response mission area includes core capabilities critical to saving lives, protecting property and the environment, and meeting basic human needs after a

² *National Preparedness System*, 1.

³ Homeland Security, *National Preparedness Goal, First Edition* (Washington DC: Government Printing Office, September 2011), 2.

⁴ *National Preparedness System*, 1.

⁵ *National Preparedness Goal*, 3.

⁶ *National Preparedness System*, 1.

⁷ *National Preparedness System*, 2.

⁸ *National Preparedness System*, 4.

⁹ *National Preparedness System*, 4.

cascading incident occurs and supporting the transition to recovery.¹⁰ Each core capability and associated capability target is summarized below.¹¹

Planning is a systematic process whereby the whole community develops executable strategic, operational, and/or community-based approaches to meet defined objectives. Its associated target requires operational plans at the federal, state, and territorial level. These plans must adequately identify critical objectives based on the planning requirement, provide an integrated sequence and scope of requisite tasks to achieve objectives, and are implementable using available resources.

Public Information and Warning requires delivering coordinated, prompt, reliable, and actionable information to communities via clear, consistent, and accessible methods. Targets include informing all affected people of critical lifesaving and life-sustaining information. Secondly, it must deliver information regarding ongoing emergency services other life-sustaining actions to facilitate the transition to recovery.

Operational Coordination establishes and maintains unified and coordinated operational structures and processes to integrate all critical stakeholders to support the execution of core capabilities. Target capabilities include mobilizing critical resources and establishing command, control, and coordination cells within affected communities throughout the duration of an incident. Additionally, forces must maintain National Incident Management System (NIMS) compliant command, control, and coordination structures to stabilize the incident and transition to recovery.

Critical transportation provides transportation (including infrastructure access and accessible transportation services) for response objectives. This includes the evacuation of people and animals, and the delivery of response personnel, equipment, and services into affected areas. Critical transportation targets include establishing access through transportation corridors and delivering resources to save lives. In addition, forces must meet basic human needs and restore basic services and community functionality.

Environmental Response/Health and Safety provides guidance and resources in response to activities involving hazardous materials, acts of terrorism, and natural disasters. Target capabilities require conducting health and safety hazard assessments to

¹⁰ *National Preparedness System*, 11.

¹¹ Subsequent core capability summations were culled from Homeland Security, *National Preparedness Goal, First Edition* (Washington DC: Government Printing Office, September 2011).

support environmental health and safety actions for response personnel and affected population. Secondly, forces must assess, monitor, perform cleanup actions, and provide resources to meet resource requirements and to transition from sustained response to short-term recovery.

Fatality Management Services provide body recovery and victim identification and work with authorities to provide temporary mortuary solutions. They share information with mass care services to reunifying family members and caregivers with missing persons/remains as well as provide bereavement counseling. Target capabilities require these personnel establish and maintain operations to recover large numbers of fatalities over a geographically dispersed area of operations.

Infrastructure Systems stabilize infrastructure, minimize health and safety threats, and restore and revitalize systems and services to support the community. Target capabilities require they decrease and stabilize infrastructure threats in heavily damaged areas and provide mass care support facilities and evacuation processing centers. These forces must re-establish critical infrastructure to support emergency response operations, life sustainment, and community functionality.

Mass Care Services provide life-sustaining services focusing on hydration, feeding, and sheltering the affected populace. Target capabilities require forces deliver resources and capabilities to meet the needs of disaster survivors and establish emergency shelters and other temporary housing options for the affected population.

Mass search and rescue delivers traditional and non-traditional search and rescue capabilities in order to save the greatest number of endangered lives in the shortest time possible. These forces must conduct search and rescue operations to locate and rescue persons in distress and initiate community-based search and rescue support operations across a wide area of operations. Furthermore, they must synchronized local, regional, national, and international teams to reinforce ongoing search and rescue efforts.

On-scene security and protection provides a safe and secure environment through law enforcement and related security and protection operations for affected communities. These forces must establish a safe and secure environment in the affected area and provide on-scene security to meet the protection requirements of the affected population while mitigating the risk of further damage.

Operational communications ensures timely communications support, situational awareness, and operations between affected communities in the impact area and response forces. These personnel must provide interoperable voice and data communications to emergency responders and affected populations capable of covering the spectrum of federal, state, and local first responders. Furthermore, they must re-establish appropriate communications infrastructure in the affected areas for ongoing life-sustaining activities and basic human needs.

Public and private services and resources ensure essential public and private services and resources to affected communities. This includes emergency power, fuel support, access to community staples, fire, and other first responders. These forces must deliver governmental, nongovernmental, and private sector resources to the affected area to save and sustain lives, meet basic human needs, and stabilize the incident.

Public health and medical services provide lifesaving medical treatment and emergency medical services to avoid disease and injury. These services should deliver medical countermeasures, triage and stabilize casualties, and return medical resources to pre-incident levels, complete health assessments, and identify recovery processes.

Situational assessment provide decision makers with relevant information concerning the nature of the event, extent of the hazard and associated cascading effects, and response status. Target capabilities include informing decision makers of lifesaving and life-sustaining activities, and engaging governmental, private, and civic sector resources to meet basic human needs and stabilize the incident.

All of the aforementioned core capabilities are critical to saving lives, protecting property and the environment, and meeting basic human needs following an incident.¹² Achieving these benchmarks suggests a responding entity is well positioned for success in a civil support scenario. Furthermore, aligning with these capabilities is an indicator that an organization can respond to any threat or hazard, including those with cascading effects, with an eye toward saving and sustaining lives and establishing a safe and secure environment.

With each core capability and target capability defined, a framework exists to measure ANG civil support capabilities. If the National Preparedness System is the

¹² *National Preparedness Goal*, 11.

method the US uses to build, sustain, and deliver core capabilities, and if national preparedness is a responsibility shared by federal, state, and local entities, and the ANG fills both federal and state roles, then measuring ANG capabilities against national preparedness core capabilities is a useful assessment tool (Table 1).

Table 1: Air National Guard Unit Type Codes vs. Response Core Capabilities

Response Core Capabilities	Matching UTCs	Personnel Matching UTCs	Percentage of Personnel Matching UTCs
Situational Assessment	71	2675	7%
Public Information & Warning	4	621	2%
Operational Coordination	59	4608	12%
Operational Communications	24	1745	5%
On Scene Security & Protection	19	7088	18%
Mass Search & Rescue	13	2358	6%
Public Health and Medical Services	29	5933	15%
Environmental Response/Health and Safety			
Critical Transportation	81	9560	24%
Mass Care	15	2200	6%
Infrastructure Systems	37	2636	7%
Fatality Management Services	2	187	.5%
Public and Private Services and Resources	0	0	N/A
Total ANG Matching Core Capabilities	354	39611	

Source: David VanGasbeck, Senior Advisor on National Guard Civil Support Requirements and Domestic Operations Strategy, derived during interview, 24 February 2012.

Data for this comparison was derived from a number of locations. They include: UTC Management Information Summary (UMIS), AEF Reporting Tool (ART), Status of Resources and Training System (SORTS), Defense Readiness Reporting System (DRRS), OPLAN participation, AEF deployments, Global Force Management (GFM), Unit Manning Document and Personnel Accounting System (UMD and PAS Code), and recruiting statistics.

UMIS is an ANG specific UTC tasking and resource system. It uses a number of sources to provide comprehensive UTC information. Sources include the Air Force Worldwide UTC Summary (AFWUS), Manpower & Personnel Module - Base Module (MANPER-B), Logistics Module (LOGMOD), National Guard Bureau/A3XR Status of

Resources and Training System (SORTS), and ANG UTC Functional Managers.¹³ Also included is data from the Manpower and Equipment Force Packaging (MEFPAK) System, a data system designed to support contingency and general war planning with predefined and standardized manpower and equipment force packages.¹⁴

ART is a web-based tool with that gives AEF-allocated units the ability to report timely and accurate UTC readiness and tasking status. ART measures five readiness categories: Personnel, Training, Warrior Skills, Equipment Supply, and Equipment Condition.¹⁵ SORTS is an “automated, near real-time readiness reporting system that provides resource standards and current readiness status for operational forces and defense support organizations in terms of their ability to perform their mission essential tasks.”¹⁶

DRRS monitors the readiness of DOD components to provide capabilities in support of the National Military Strategy as specified in the defense and contingency planning guidance, Theater Security Cooperation Guidance, and the Unified Command Plan.¹⁷ GFM presents comprehensive insight into the global availability of US military forces and provides senior decision makers a vehicle to assess the impact and risk of proposed allocation, assignment, and apportionment changes.¹⁸

Data from the aforementioned sources suggest that of approximately 106,000 ANG personnel, nearly 40,000 people and 354 UTCs correlate to national preparedness core capabilities within the response mission area. Furthermore, despite training for the federal mission and at no additional cost to the states, over one third of the ANG is aligned with PPD-8 core capabilities and positioned appropriately within the NRF.

Additionally, data suggests the ANG possesses a vast number of discrete building blocks (UTCs) that comprise specialized capabilities required in the National Preparedness System. Strengths reside in critical transportation, on-scene security and

¹³ Air Force Instruction (AFI) 10-244, Air National Guard, *Reporting Status of Aerospace Expeditionary Forces*, 2 December 2008, 6.

¹⁴ Air Force Instruction (AFI) 10-401, *Air Force Operations Planning and Execution*, 7 December 2006, 73.

¹⁵ Air Force Instruction (AFI) 10-244, *Reporting Status of Aerospace Expeditionary Forces*, 27 September 2010, 7.

¹⁶ DOD Directive (DODD) 7730.65, *Department of Defense Readiness Reporting System (DRRS)*, 23 April 2007, 8.

¹⁷ *Department of Defense Readiness Reporting System*, 8.

¹⁸ *Air Force Operations Planning and Execution*, 19.

protection, environmental response, and medical services. Critical transportation equates to a robust air mobility capability that is the backbone of the ANG. The ANG operates an air mobility fleet of nearly 400 aircraft capable of transporting food, supplies, manpower, and equipment into and out complex catastrophic incident sites.¹⁹ Furthermore, a large portion of the fleet is airdrop capable. This permits continued supply efforts when critical overland road infrastructure is damaged or destroyed due to the incident.

On scene security and protection equates to security forces (SF). SF personnel can provide the safe and secure environment for local, state, and private partnerships to work effectively to stem the tide of suffering and human devastation incurred by a complex catastrophe. Following a catastrophic event, local responders in the state will be stretched to their breaking point. Security forces personnel can provide a sense of security and reassurance for the public. Lacking public security and reassurance, little else happens.

Additionally, a unique feature of ANG security forces personnel, unlike their Title 10 counterparts, is their ability to administer civilian law enforcement. The Posse Comitatus Act (PCA) prohibits Title 10 forces from civil law enforcement activities. However, ANG security forces are not beholden to this act when operating in state active-duty or Title 32 status.²⁰ The combination of rapid mobility through critical transportation with inherent law enforcement authorities makes ANG security personnel an attractive capability in a complex catastrophic scenario.

Environmental response UTCs includes civil engineering (CE) forces. ANG CE strengths include the manpower and equipment to clear roads and towns of debris. They effectively clear the path for civilian responders and private partners to administer aid, supplies and further search and recovery efforts throughout the populace. They can also provide power generation and bed down facilities for civilian responders unaccustomed to working in bare based environs.²¹

Medical services equate to the ANG's robust medical support apparatus. Central to the ANG's federal mission is its ability to administer medical aid in forward deployed

¹⁹ Col Gary L. Akins (National Guard Bureau/A3D), briefing attended by author, 23 February 2012.

²⁰ *DSCA Handbook*, 1-6.

²¹ Fugate, address Domestic Preparedness Workshop.

areas as well as transport patients to larger facilities outside the area of operations (AOR). These capabilities transfer seamlessly to a catastrophic incident scenario. Small teams can be deployed close to the incident site to affect urgent care and patient stabilization while awaiting transport to larger facilities in less damaged locales.²²

Such a large correlation between core competencies and discrete building blocks (UTCs) suggests the ANG possesses special capabilities of relevance to the National Preparedness System. If 40,000 people within 354 UTCs, by virtue of their federal mission, are capable providing a direct effect in a civil support scenario at no additional training cost, then the ANG is adequately positioned to “go smart” when responding to a complex catastrophic incident.

ANG Capability vs. FEMA Regions

The next level of analysis examines where civil support capability resides in relation to FEMA regions (Figure 2). As mentioned in Chapter 1, FEMA is the executive agent to DHS for emergency management responsible for disaster response, planning, recovery, and mitigation. Each FEMA region serves as the focal point for organizing and coordinating state and federal emergency management for incidents within each region. For this assessment, all dual use personnel, equipment, and vehicles are aligned into Essential 10 categories. These represent 10 ANG core capabilities needed to respond to emergencies and major disasters in the US. It is DOD and National Guard Bureau policy that emergency or major disaster functions are performed using dual-use equipment.²³ Approximately 88 percent of ANG assets are dual-use.²⁴ This affords ample utility in both federal and civil support missions.

²² Lt Col Brett Fehrle (National Guard Bureau/SGAX), author attended briefing, 23 February 2012.

²³ *National Guard and Reserve Equipment Report for FY 2012*, B-1.

²⁴ *National Guard and Reserve Equipment Report for FY 2012*, 5-9.



Figure 2: Federal Emergency Management Agency Regions

Source: Ken Franklin Senior Advisor, National Guard Civil Support (NGCS) Requirements Planning, National Guard Bureau/A7

A correlation of personnel numbers, Emergency Support Functions, and FEMA regions suggest more than 76,000 of 106,000 ANG personnel are dual-use capable and fall within a particular FEMA region (Table 2). Each FEMA region contains a portion of every ANG Essential 10 capability. The data suggests, despite small variances, the ANG is capable of providing discrete building blocks and specialized capabilities correlating to the National Preparedness System across every FEMA region. As such, the ANG is able to provide the spectrum of capabilities to any region throughout the nation. This equitable dispersion allows for shorter response distances, thus shorter transit times. Shorter transit times are critical for quick response actions. Consequently, the quicker the response, the greater the chance of saving and sustaining lives.

There are two coordinating entities, or central nodes, required to affect success within a FEMA region. First, is the National Guard Joint Force Headquarters (JFHQ). The JFHQ, with the aid of the State Coordination Officer, must assess the situation on the ground, assimilate disparate sources of information, and communicate what its forces are doing and what forces it may need from neighboring states through EMAC. State-to-state deconfliction of ANG resources is a challenge undertaken by every affected JFHQ, both supported and supporting.

Table 2: Number of Air National Guard Essential 10 Personnel Corresponding to Federal Emergency Management Agency Regions

FEMA Region	C2	CBRNE	Comm	CE	Logistics	Trans	Security	Medical	Maint	Aviation	Total	%
1	1020	45	122	526	804	32	522	352	1652	568	5643	7.3
2	849	42	74	696	1063	48	609	466	2146	718	6711	8.7
3	795	49	116	1142	1253	49	688	682	2759	1209	8778	11.4
4	2014	85	294	1426	1860	82	909	937	3746	2182	13535	17.7
5	1812	84	181	1453	1893	81	1152	823	4096	1483	13058	17
6	1042	45	155	640	1078	49	675	522	1918	470	6594	8.6
7	1175	42	44	535	844	37	483	417	1393	794	5764	7.5
8	1096	50	49	639	693	31	413	394	1854	442	5661	7.4
9	1207	44	117	553	1086	43	553	523	1161	623	5910	7.7
10	896	29	87	463	677	38	393	373	1618	578	5152	6.7
E-10 Totals	11906	515	1239	8073	11251	490	6397	5489	22379	9067	76806	
% of Total	15.5	0.7	1.6	10.5	14.6	0.6	8.32	7.1	29.1	11.8		
E-10 Rank	2	9	8	5	3	10	6	7	1	4		

Source: Adapted from Ken Franklin, Senior Advisor, National Guard Civil Support (NGCS) Requirements Planning, National Guard Bureau/A7 interview 24 February 2012.

The second critical node is the National Guard Bureau through the National Guard Coordination Center (NGCC). The NGCC is the focal point for strategic level communication between NGB, states, federal agencies (FEMA), and the military (combatant commanders). The NGCC can assist states within an affected FEMA region with asset deconfliction and sourcing. An affected state solicits a request for forces (RFF) to the NGCC. It then canvasses non-affected ANG resources from throughout the country for voluntary assistance. The NGCC is a coordinating entity and does not command state assets. States that elect to volunteer their resources only do so with the approval of their governor as they remain in state active-duty or Title 32 status.

Additionally, since 88 percent of ANG equipment is considered dual-use, the vast majority of resources may be used in a civil support role in addition to their primary, or federal, mission. For instance, the majority of airlift can be used to transport similar supplies and equipment in a complex catastrophe as can be transported in an OCONUS environment. Similar parallels exist with medical support. The ANG provides many enabling effects as part of their respective federal mission. They have the same enabling effect in civil support operations.

The variance of ANG capabilities among FEMA regions has a multiplicative affect. The preponderance of dual use resources means more forces and facilities are available for use both in the federal and civil support role. This allows for greater flexibility and increases efforts geared toward saving and sustaining lives. Each region contains the spectrum of enablers required to affect success in a complex catastrophe. No region owns a one-off, finite capability that once used is off the board for the duration. Furthermore, since each region contains the requisite enablers, transit and response times are reduced. Dual use equipment combined with collective action, as facilitated by JFHQ-States and National Guard Coordination Center, enable civil support beyond local bases with resources capable of affecting federal and/or civil support success. All of these factors combine to pave the way for the ANG to “go fast” when needed in a complex catastrophe.

National Capabilities

Lastly, ANG Essential 10 capabilities were matched with 15 Emergency Support Functions (Table 3) to assess the degree of correlation between ANG capabilities and national capabilities (ESFs). As mentioned in Chapter 1, DHS utilizes the National Response Framework to respond to natural and manmade hazards, minimize damage, and aid recovery efforts. It is a single framework to manage domestic incidents and provides mechanisms to coordinate federal support to local, tribal, territory, and state incident managers. ESFs are central to the NRF. They align categories of resources and are a critical mechanism for grouping functions most frequently used to provide federal support to states and federal-to-federal support, both for declared disasters and for emergencies.

Table 3: Emergency Support Function Correlation to ANG Essential 10 Capabilities

Emergency Support Function (ESF)	ANG Essential 10 Capability
ESF#1 Transportation	Transportation, Aviation/Airlift
ESF#2 Communication	Communications
ESF#3 Public Works and Engineering	Engineering
ESF#4 Firefighting	Engineering, Aviation/Airlift
ESF#5 Emergency Management	Command and Control
ESF#6 Mass Care, Emergency Assistance, Housing, and Human Services	Logistics, Maintenance
ESF#7 Logistics Management and Resource Support	Logistics, Maintenance
ESF#8 Public Health and Medical Services	Medical, Maintenance
ESF#9 Search and Rescue	Engineering, Aviation/Airlift
ESF#10 Oil and Hazardous Materials Response	Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE) Response
ESF#11 Agriculture and Natural Resources	Logistics, Medical
ESF#12 Energy	Maintenance, Logistics
ESF#13 Public Safety and Security	Security, Aviation/Airlift
ESF#14 Long Term Community Recovery	Command and Control
ESF#15 External Affairs	Command and Control

Source: Air National Guard 2011 Domestic Operations Equipment Requirements (DOERS) Book.

Analysis of ANG Essential 10 capabilities against ESFs (Table 4) suggests the ANG's unique and special, multipurpose capabilities dovetail with established ESFs. This permits a common reference point for communication between state or federal officials when a RFA or request for forces (RFF) is needed.

For example, command and control (C2) UTCs align with emergency management and external affairs. Many of these UTCs exist within the each state's JFHQ or the National Guard Coordination Center. They oversee and coordinate ANG response efforts at the incident site, the state HQ, and the National Guard Coordination Center. In light of the poor situational awareness exhibited by NG and Title 10 forces during Hurricane Katrina, specifically a lack of awareness regarding what the other was doing, C2 is of paramount importance in a complex catastrophe. Both the JFHQ and dual status command program were established following Katrina to strengthen unity of effort and transparency in the incident area.

Table 4: Air National Guard Essential 10 Personnel Correlation to Emergency Support Functions

ESF	C2	CBRNE	Comm	CE	Logistics	Trans	Security	Medical	Maint	Aviation	Total	%
1	983					490				6671	8134	10.2
2			3321								3321	4.2
3				5662							5662	7.1
4				2219							2219	2.8
5	10046										10046	12.7
6					623						623	0.8
7					10544				22379		32923	41.4
8					187			5489			5676	7.1
9				317						702	1019	1.3
10		765									765	1
11											0	0
12											0	0
13							6467			1704	8171	10.3
14											0	0
15	961	0	0	0	0	0	0	0	0	0	961	1.2
Total	11990	765	3321	8198	11354	490	6467	5489	22379	9067	79520	

Source: Adapted from David VanGasbeck, Senior Advisor on National Guard Civil Support Requirements and Domestic Operations Strategy, interview, 24 February 2012.

CE UTCs correlate with public works, firefighting, and search and rescue ESFs. These UTCs can work cooperatively with civilian responders to make incident sites safe or, at a minimum, workable. Short of this, the work force and resources flowing from the private sector, (food, water, and shelter) comes to halt, as does the process of saving and sustain lives.

The level of damage and debris blocking and choking roads and associated transportation infrastructure would be immense in a complex catastrophe. Broken gas lines would cause innumerable fires. This would only exacerbate an already difficult situation with thousands of people trapped in collapsed buildings. CE personnel could move debris to allow firefighters access to fight the fires.

With fires under control, search and rescue forces could then canvass the areas for survivors. Concurrently, CE personnel would assess and mitigate the damage to public works (power generation, water supply) with indigenous equipment and supplies. This is imperative since responding entities lacking their own supplies are an additional drag on what little resources exist in the few hours following the event.

Logistics UTCs align with emergency assistance, logistics management, and public health. These people coordinate the movement of supplies and resources. The

intent is not for ANG personnel to hand out food and supplies, per se. Rather, they coordinate and affect the transportation and staging of supplies so FEMA and/or local, state, and territory officials may distribute appropriately. ANG logistics personnel can assume a billeting and feeding role for responding personnel but lack the resources for mass shelters of the size and scope to be expected in a complex catastrophe.

Security Forces UTCs align with public safety and security ESFs. Security is paramount in an incident site. They are required not necessarily to stem the threat of looting, but to offer a re-assuring presence. People who have experienced a tragedy are often traumatized or disoriented. The presence of order and authority often calms those traumatized. Security Forces personnel can work with local law enforcement personnel to provide said order and authority.

However, many law enforcement personnel will be impacted by the catastrophe. Their homes may be destroyed, family members hurt, or missing. They will be dealing with the catastrophe on a personal level and unable to assist in law enforcement efforts. ANG security personnel from unaffected states can provide the manpower to mitigate the loss of law enforcement personnel in the impacted area.

Furthermore, the Posse Comitatus Act does not inhibit ANG personnel while in state active-duty or Title 32 status thus they can effectively administer civil law enforcement. There again, lacking order or some semblance of control, the likelihood of private partners affecting aid and supplies is unlikely. ANG Security Forces, arriving quickly, can establish order and pave the way for follow-on efforts to save and sustain lives.

Medical UTCs fall within the public health and medical services ESF. The cascading effects of a complex catastrophe will stress local, county, territory, and state resources to the breaking point. FEMA medical resources, despite their depth and breadth, will struggle as well. ANG medical expertise provides another tier of capacity as the size and scope of the event widens.

To be sure, ANG personnel will not stem the tide of humanitarian disaster alone. That is not the intent. Given their relative proximity (due to FEMA region), mobility, transportability (via indigenous air assets), and relatively quick call to action (through state EMAC channels), ANG medical personnel offer an excellent means to quickly

access an incident site and effectively begin the process of treating and moving the ill and injured out of harm's way.

The volume of injuries and illness will be immense. Patient throughput will be paramount. Multiple staging facilities can progressively move affected people out of the incident site to mass staging areas where they may be airlifted to larger facilities for more in depth care. ANG medical expertise can cover the spectrum of care, from initial triage through various surgical procedures.

Aviation UTCs align with the transportation, search and rescue, and public safety and security ESFs. These UTCs are the glue that enables the ANG to package and position its unique capabilities in a complex catastrophic environment. There again, the intent is not for the ANG to assume the role of lone provider of supplies and resources. FEMA has the means to contract with various providers for logistical support. However, state ANG forces can respond quicker.

A governor's ANG force is a state entity. The governor is expected to use state resources prior to FEMA involvement. Certain thresholds must be crossed before FEMA enlists larger federal government backed aid to assist in the response. The governor does not have to wait for these thresholds to use the state ANG. The size and scope of a complex catastrophe will undoubtedly require FEMA involvement in the end. The point remains that until the President and FEMA allow for larger federally backed resources, state ANG resources can already affect a state solution to response efforts.

The robust air mobility presence and ANG search and rescue helicopter capability allows the conveyance of personnel, supplies, and life sustaining capabilities into and out of incident sites. The effectiveness of aforementioned CE, logistics, and medical UTCs, all critical enablers for follow on civilian responders, is predicated on the air mobility presence afforded by the ANG.

These UTCs groupings and their associated ESFs are the primary focus for three reasons. First, each capability is multi-purpose. For instance, every specialty has a primary federal war-fighting mission that corresponds to the civil support environment. In fact, the level of destruction and disarray associated with a complex catastrophe will be the closest thing to a combat environment outside of actual combat. Logic dictates

that resources trained and optimized to operate in stressful, bare based environs are well suited for a complex catastrophe.

That is not to say all military forces are well suited for this particular mission. State ANG forces (and NG en-masse), are the only military entity responsible to their respective governor and thus expected to accomplish the civil support mission with regularity. In fact, the DOD Strategy for Homeland Defense and Civil Support, while accepting of a total force responsibility for civil support, emphasized a need to focus greater attention on NG competencies for civil support operations.²⁵

Title 10 forces, while demonstrably larger, have less responsibility in these matters. DSCA obligations indeed enlist the SECDEF to make his Title 10 forces available should FEMA require their assistance. However, the understanding is Title 10 forces are a force of last resort, the last in and first to depart. Conversely, state ANG forces can be the first in should the effected governor elect to use this option.

Second, these UTC groupings align with national capabilities required in the NRF. They reflect a required degree of commonality. By residing in a common frame of reference, they enable effective communication among interested partners regarding what is in place and what is required should an RFF/RFA go forward.

Lastly, these UTCs are well positioned to combat the challenges inherent to a complex catastrophic environment. The coalescing capability of air mobility unites the aforementioned UTCs into an effective force capable of making early in roads to an incident site, securing passage, securing the environment, conducting search and rescue, enabling follow-on supply, and taking actions to save and sustain lives.

In short, the ANG can “go smart” in a complex catastrophe due to its UTC packaging and inherent dual use capabilities. Furthermore, it can “go fast” because of its indigenous air mobility prowess and flexibility.

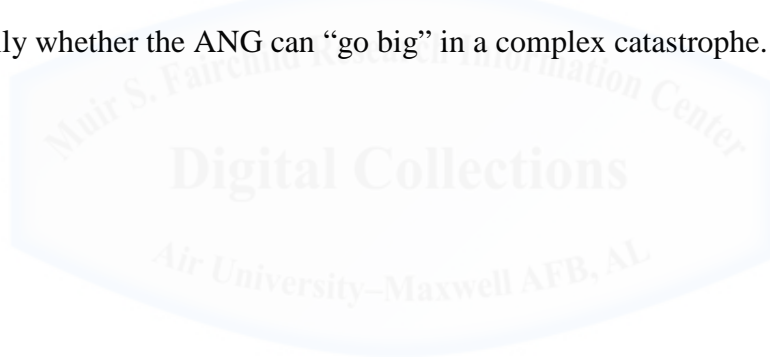
Summary

This chapter examined whether the ANG can “go fast and go smart” by analyzing ANG UTCs and personnel against PPD-8 core capabilities, FEMA regions and ESFs. Analysis suggests three things. First, the ANG is comprised of discrete building blocks

²⁵ Department of Defense, *Strategy for Homeland Defense and Civil Support*, (Washington DC, Government Printing Office, 2005), 35.

with unique and specialized capabilities. Second, the manner in which ANG capabilities are dispersed within each FEMA region allows for greater flexibility and reduced response timelines since a wider variety of forces and facilities are available for use. Additionally, since the majority of these resources are dual use, they are available not only for federal wartime missions but for civil support use as well. Lastly, ANG mission sets are multi-purpose, align with national capabilities, and are well positioned to combat the challenges inherent to a complex catastrophic environment. The collective analysis thus far suggests the ANG is structured to “go fast and go smart” in order to save and sustain lives during a catastrophic event.

Chapter 3 looks beyond individual UTCs and examines in further detail the larger strengths posited in the ESF evaluation, specifically the packaging of complementary UTCs into holistic capabilities: command and control, civil engineering, logistics, security, medicine and aviation. This effort endeavors to address the capacity issue, specifically whether the ANG can “go big” in a complex catastrophe.



Chapter 3

National Civil Support Capabilities

While Chapter 2 examined ANG civil support capability from an aggregate perspective, Chapter 3 addresses the capacity question, or the “go big,” portion of the thesis. This chapter disaggregates UTCs and personnel into their holistic working groups. National capabilities derived from analysis in chapter 2 are examined to determine their requisite strengths and weaknesses as well as whether they can provide a safe and secure environment for local, state, and private sector partnerships to work effectively in a cascading complex catastrophe environment. Analysis suggests these groups represent national capability comprised of discrete building blocks with unique and specialized attributes. They span many mission sets, are multi-purpose, and can be applied against a complex catastrophic problem to save and sustain lives.¹

The Contingency Response Group can deploy scalable expeditionary air mobility forces across the full range of operations to rapidly establish, sustain, and coordinate global air mobility operations from fixed, established sites or austere operating locations.² The Contingency Response Group is comprised of 115 personnel organized into two squadrons: the Global Mobility Squadron and the Global Mobility Readiness Squadron. When deployed, the Contingency Response Group executes a unique subset of capabilities designed to respond rapidly to state, national, or global crisis. Capabilities include rapid airfield assessment, initial airbase opening, aeromedical evacuation, humanitarian assistance, and disaster relief operations. Contingency Response Group personnel encompass 38 different Air Force Specialty Codes providing a vast array of knowledge and skillsets needed to carry out the high-tempo nature of airfield operations.

Two Contingency Response Groups reside in the Air National Guard. The 123 CRG is located at Louisville, Kentucky, is part of the 123 Airlift Wing (AW), which

¹ Information for this chapter obtained through interviews and briefings with ANG subject matter experts at the February 2012 Domestic Preparedness Workshop in Washington D.C, 22-24 February 2012. Subsequent references annotated following each section.

² Maj Bruce Bancroft (123d Contingency Response Group), interview by author, 22 February 2012.

operates C-130s. The 108 CRG is at Joint Base McGuire-Dix-Lakenhurst, New Jersey, is organized as part of the 108 ARW, and operates KC-135s.³

Recognizing the importance of getting the Contingency Response Group to the incident site as quickly as possible, the 123rd Airlift Wing (AW) created the Initial Response Hub concept.⁴ This is an evolving capability unique to the ANG and to the 123 AW specifically. No Operations Plan (OPLAN) capability exists to open an air base immediately following an event so search and rescue (SAR) personnel, emergency response personnel, equipment and commodities may arrive on scene. While Title 10 contingency response forces meet OPLAN 12-hour ready to load requirements, the Initial Response Hub fills the 4-12 hour response gap in a domestic crisis response.⁵ This decrease in response time is critical to saving lives in a disaster.

Title 10 Contingency Response forces depend upon US Transportation Command (TRANSCOM) to source airlift from their alert location to the disaster area.⁶ Initial Response Hub personnel can launch three-hours following tasking and consequently respond inside the USTRANSCOM sourcing timeline. The Incident Response Hub will launch on order from NORTHCOM, USTRANSCOM, National Guard Bureau, or the Governor of Kentucky, depending upon Title 32 or Title 10 status.⁷ Once in place, the Initial Response Hub can transition from Title 32 to Title 10 as appropriate in support of federal emergency declarations. Initial Response Hub aircraft can respond to the upper Northeast and Texas in three hours via organic C-130 airlift, or as far as California in five hours. Louisville, KY is within three hours flying time of 60 percent of the US population.⁸

Complex catastrophic events require immediate access to airfields to move innumerable responding agencies and commodities to support immediate life-saving activities thus providing a safe and secure environment for local, state, and private sector partnerships to work effectively. During the response phase, the Initial Response Hub provides immediate situational awareness, coordination, early assessment, and initial

³ Bancroft, interview by author, 22 February 2012.

⁴ Col Gregory Nelson, "Initial Response Hub Concept of Operations (CONOPS)," 31 January 2012, 2.

⁵ "Initial Response Hub CONOPS," 10.

⁶ *DSCA Handbook*, 3-17.

⁷ "Initial Response Hub CONOPS," 10.

⁸ "Initial Response Hub CONOPS," 4.

operating capability of the selected airfield. Any crisis requiring airfield access must undergo an assessment to ensure the airfield can support the type and numbers of aircraft as well as the volume of equipment and personnel anticipated for the response operation. Airfields near an earthquake may only support limited landings before repair work is accomplished.

The Initial Response Hub Assessment Team deploys as a first-in force to assess runway and taxiway capability, aircraft parking capacity, airfield day/night/all-weather operational capability, airfield security, aerial port (logistical) staging capacity, fuel availability, FAA and ATC coordination, communications requirements, and overall facilities, transportation, and local medical capabilities. The team arrives self-contained with all equipment, radios, vehicles, tents, food, and water for five days without resupply.

In many situations, the Initial Response Hub Special Tactics Team may be required to open an airfield, provide initial air traffic control, survey drop zones (DZs) or new landing zones (LZs), and/or provide search and rescue operations and/or expertise. This team can airdrop into an airfield providing initial runway assessment and then clear that same aircraft to land. In the event of an earthquake, this is a critical time saving capability.

Additionally, the Initial Response Hub includes a medical subject matter expert (SME) assessment and analysis for airfield operational capability supporting aero-medical evacuation (AE), expeditionary medical support (EMEDS), and medical response to chemical, biological, radiological, nuclear (CBRN) incident or attack.⁹

Integral to the Contingency Response Group and Initial Response Hub are search, rescue, and special tactics personnel. ANG Search and Rescue/Special Tactics teams offer dual use civil support capabilities during a complex catastrophe. They are capable of running airfields and coordinating rescue efforts. They have advanced medical and FAA control certifications enabling them to work outside the confines of the DOD and within the civilian community. ANG search and rescue is comprised of HH-60G Helicopters, HC/MC -130 Aircraft, Combat Control/Special Tactics officers, and Guardian Angels (Combat Rescue Officer/Pararescue (PJs)).

⁹ Col Gregory Nelson (123 AW/CC), interview by author, 12 February 2012.

Combat Controllers and Special Tactics Officers are dedicated DOD Tactical Air Traffic Control Specialists capable of ensuring FAA certified air traffic control at airfields and dirt strips, command and control, and airfield survey, establishment and operation. Following Hurricane Rita, two Combat Control teams, one PJ, and one special operations weather team controlled 800 military and civilian aircraft for eight hours at Chennault airfield in Lake Charles, Louisiana.¹⁰

Search and rescue personnel also specialize in humanitarian assistance airdrops and helicopter landing zone operations. They can establish “lily pads”, or patient transfer staging areas, to facilitate patient movement out of the incident site. They controlled hundreds of lily pads during Hurricane Katrina.¹¹ With Guardian Angels, they can land aircraft, triage patients, and facilitate transport based on patient need, getting victims to higher medical authority in an expeditious manner.

Guardian Angels are dedicated DOD rescue specialists capable of specialized rescue operations in all environments to include in and around confined spaces and collapsed structures. Their PJs are mass-casualty experts and are trained National Registry of Emergency Technician Paramedics capable of providing Advanced Cardiac Life Support and Pediatric Advanced Life Support. Many PJ’s work in civilian communities as EMS responders, physician assistants, and doctors.

Special Operations Weather Teams (SOWT) are dedicated DOD environmental specialists capable of analyzing weather conditions and trends and forecasting in all environments. They provide meteorological observation and analysis as well as terminal and mission specific forecasts and briefings. They provide on scene real-time information whether in avalanches, floods, hurricanes, or forest fires.¹²

ANG Search and Rescue forces can employ in a manner of means. They can enter urban, forested, or open water areas via parachute, helicopter, amphibious watercraft, or sub-surface. Following Hurricane Katrina, all units acquired shallow hull watercraft, allowing teams to move through shallow water with heavy debris.¹³ All teams are

¹⁰ CMSgt Paul Nelson (National Guard Bureau/A3XO), author attended briefing, 22 February 2012.

¹¹ Nelson, author attended briefing, 22 February 2012.

¹² Nelson, author attended briefing, 22 February 2012.

¹³ Nelson, author attended briefing, 22 February 2012.

certified in black water diving techniques. Units are equipped with side scan and sector sonar and can conduct advanced underwater recovery operations.¹⁴

Once the Contingency Response Group and Initial Response Hub open airfields or drop zones, an access point is available to bring in much larger capability to begin the life saving and sustaining process. ANG Civil Engineering provides both local and worldwide capabilities and is relevant and critical to life saving and infrastructure restoration. ANG CE strives to meet FEMA priorities by clearing routes in and out of the incident area (getting there); providing security forces (securing the area); providing rescue fire fighters (rescuing the injured); providing shelters (stabilize community); and providing water and power (provide resources).

During wartime or domestic operations, the mission of ANG civil engineers is to provide the bases, infrastructure, and facilities necessary to support the global engagement of aerospace forces across the spectrum of conflict. In doing so, ANG civil engineers provide installation engineering, expeditionary engineering, environmental management, and emergency services.

In the ANG, there are approximately 8800 civil engineer personnel in all 50 states, the District of Columbia, Guam, and Puerto Rico.¹⁵ The ANG utilizes three types of civil engineer organizations. The primary unit is the Prime Base Engineer Emergency Support Force (BEEF) team. These 55-person deployable teams can support all base operating missions.¹⁶ In addition, they can support recovery operations after a man-made or natural disaster to assess damage, fight fires, mitigate hazards, provide emergency utilities, bed-down military forces, repair facility damage, and control and monitor contamination.¹⁷ Seventy-One Prime BEEF teams reside in the ANG.¹⁸

The second civil engineering organization is the Rapid Engineer Deployable Heavy Operation Repair Squadron Engineer (RED HORSE) team. Each team of 200 deployable personnel provides construction, heavy repair, and force bed-down

¹⁴ Nelson, author attended briefing, 22 February 2012.

¹⁵ National Guard Bureau/A7X, *Joint Staff Guidebook on Air National Guard Civil Engineer Capabilities* (Washington DC: Government Printing Office, 2011), 2.

¹⁶ National Guard Bureau/A7X, *Air National Guard Civil Engineer Capabilities*, 2

¹⁷ Air Force Civil Engineering Support Agency, "United States Air Force Prime Beef Units," <http://www.afcesa.af.mil/shared/media/document/AFD-090227-115.pdf> (accessed 1 May 2012), 1.

¹⁸ National Guard Bureau/A7X, *Air National Guard Civil Engineer Capabilities*, 2

capabilities in remote, high threat environments.¹⁹ RED HORSE teams operate larger, heavier equipment and are self-sufficient in that they can provide their own security and services, such as food and medical, for up to 30 days.²⁰ There are five RED HORSE teams in the ANG.²¹

The smallest CE team is the Staff Augmentation Team (S-Teams). S-Teams are unique to the ANG. They are an engineer force structured to provide command and control augmentation for Joint Task Forces or theater command staffs. S-Teams also provide technical design and construction management capabilities. There are five units in the ANG, each capable of fielding multiple staff augmentation teams. There are also 17 affiliate teams used to support the S-Teams. Finally, the Prime BEEF team, RED HORSE team, and S-Team can deploy in its entirety or as sub-components.²²

Recent natural disaster events left indelible marks on the ANG CE force. Hurricane Katrina showed the importance of getting there and stabilizing the community. Hurricane Irene's path up the east coast into New England forced CE personnel to adapt to working environs very different from the coastal regions typically affected by hurricane activity. The Haiti earthquake made engineers take notice that rescue workers needed a place to live also.²³ Annual ice storms during winter months always show there are never enough generators. Finally, Missouri and Arkansas tornado rescue efforts highlighted the difficulties inherent in structural collapse rescues.²⁴

With ground and air access points into and out of the incident site established, critical lifesaving infrastructure can unfold. The ANG retains robust civil support operations capabilities. ANG medical personnel provide a continuum of care (triage, stabilization, and preparation for transport) from the incident site to the definitive care facility. All personnel and equipment are dual use.

CBRN Enhanced Response Force Package (CERFP)/Homeland Response Force (HRF) medical elements comprise 47 medical personnel capable of responding in 6-12

¹⁹ National Guard Bureau/A7X, *Air National Guard Civil Engineer Capabilities*, 2

²⁰ Air Force Civil Engineering Support Agency, "United States Air Force Red Horse Squadrons," <http://www.afcesa.af.mil/library/factsheets/factsheet.asp?id=16723> (accessed 1 May 2012), 1.

²¹ National Guard Bureau/A7X, *Air National Guard Civil Engineer Capabilities*, 2

²² National Guard Bureau/A7X, *Air National Guard Civil Engineer Capabilities*, 3

²³ Col Richard Edwards (National Guard Bureau/A7X), author attended briefing, 22 February 2012.

²⁴ Edwards, author attended briefing, 22 February 2012.

hours with set-up in 90 minutes.²⁵ Each CERFP/HRF medical element provides triage, lifesaving stabilization, and preparation for transport.

The Air National Guard's Expeditionary Medical Support (EMEDS) is a modular, scalable, rapid response medical package used in humanitarian relief, wartime contingencies, and disaster response operations.²⁶ The package contains four unique and distinct building blocks: Small Portable Expeditionary Aerospace Rapid Response (SPEARRR), EMEDS Basic, EMEDS+10 and EMEDS+25 personnel and specialized equipment components. SPEARR is the initial equipment and personnel set of the EMEDS construct.²⁷ It brings medical equipment, supplies, a tent, and 12 medical personnel to perform life-saving operations to include patient stabilization and surgical procedures and can treat a population at risk of up to 500 personnel.

EMEDS Basic brings additional medical equipment and supplies, and builds to three tents. It allows for 28 medical personnel and can care for 500-2,000 personnel. In addition to surgical care, EMEDS Basic provides primary medical care and prevention services and has four holding beds that rely on aeromedical evacuation to transport the patient to more definitive medical care facilities. EMEDS Basic allows for a rapid response capability with a minimal airlift footprint.

EMEDS+10 is true hospital capability with 57 medical personnel. Patient volume is 2,000-3,000 people. It can care provide 24 hour critical care and ancillary services include laboratory, radiology, pharmacy, and dental care. EMEDS+25 have nine tents, 85 medical personnel, and care for 3,000-5,000 patients. EMEDS+25 packages can care for a mix of 25 surgical and medical inpatients. EMEDS facilities may be merged to form an Air Force Theater Hospital (AFTH). The AFTH can provide robust care in large disaster responses.

The Mobile Aeromedical Staging Facility (MASF) is a rapid response Aeromedical Evacuation (AE) patient staging facility. It may be operationally capable within one hour of employment and provides the ability to receive, process and support patients awaiting AE. The MASF is continuously staffed and may process over 40 patients a day.

²⁵ Fehrle, author attended briefing, 23 February 2012.

²⁶ Fehrle, author attended briefing, 23 February 2012.

²⁷ Fehrle, author attended briefing, 23 February 2012.

AE consists of AE Ops Teams, AE Liaison Teams, AE aircrew, and AE Communication Teams. AE Ops Teams provide crew management support while AE aircrew provides in flight medical care. AE Liaison Teams coordinate and verify patient/flight movements. The AE Communication Teams provides fixed communication support. The Critical Care Air Transport Team (CCATT) in conjunction with AE crews provide critical care to evacuated injured, ill, and burn patients requiring advanced care during transportation. Each CCATT contains a critical care physician, critical care nurse, and respiratory technician.²⁸

Figure 3 shows the degree to which the ANG's medical capability is dispersed throughout the US. In the event of a complex catastrophe, varying levels of medical capability may respond to any part of the country and be assured of follow-on capability in the event the incident grows in scale. ANG medical capability is one of great breadth and depth and brings an additional tier of medical responsiveness to a complex catastrophe.

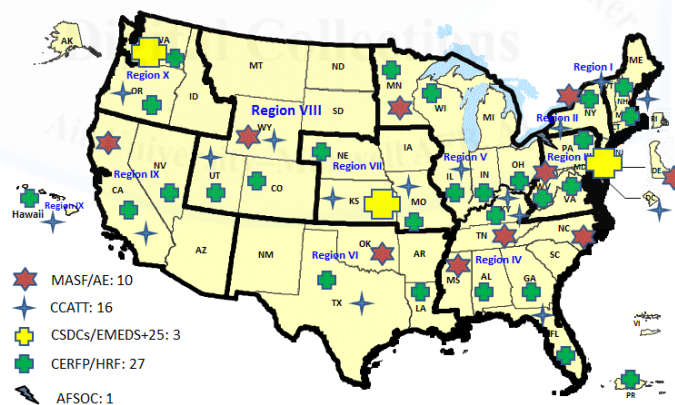


Figure 3: Survey of Air National Guard Medical Capability

Source: Lt Col Brett Fehrle, National Guard Bureau/SGAX

While administering lifesaving care and working to stabilize the incident site, civilian first responders and military personnel require logistical support as well. ANG force support capabilities provide the initial bed-down support for civil support contingencies. Force support personnel are postured at 90 ANG installations and across

²⁸ Fehrle, author attended briefing, 23 February 2012.

every FEMA region to support mass feeding, accountability, lodging, and fatality management requirements.

Personnel Support for Contingency Operations (PERSCO) teams provides commanders with Total Force accountability during deployed operations. PERSCOs provide accountability, casualty reporting, and advice on personnel programs in support of domestic or contingency operations. Each PERSCO teams deploy with limited support equipment and supplies.²⁹

Prime Readiness in Base Services (RIBS) teams cover a wide range of functions to include food service, lodging, mortuary affairs, and fatality search and recovery. Every Force Support Squadron maintains a basic Search and Recovery equipment kit to support non-CBRNE operations, and the majority of Force Support Squadrons have a Single Palletized Expeditionary Kitchen (SPEK) postured in their organization.

The primary mission of the ANG Fatality Search and Recovery Team (FSRT) is the search and recovery of fatalities from a CBRNE environment to a coordinated body collection point.³⁰ All ANG bases have search, rescue, and limited Mortuary Affairs (MA) capability. FSRTs respond to mass fatality operations or accidents and can support local, tribal, state, or federal agencies.³¹ FRST members responded to the Haiti earthquake where most of the estimated 150,000 to 200,000 people believed killed were dumped in mass graves. ANG Sustainment Services Airmen trained in mortuary affairs worked side-by-side with the Army mortuary affairs soldiers and Health and Human Services (HHS) Disaster Mortuary Operations Response Team (DMORT) assisting in search & recovery and other mortuary operations.

Force Support personnel, in conjunction with civil engineering personnel, set-up and maintain the Disaster Relief Beddown System (DRBS). The DRBS billets and supports 150 personnel via a rapidly deployable, sustainable, and expandable housekeeping set at forward operating locations. The DRBS is intended for bare base or AOR operations. These assets were recently used in Haiti for Operation Unified Response.

²⁹ Nathaniel Church (National Guard Bureau/A1SC), author attended briefing, 22 February 2012.

³⁰ *National Guard Domestic Operations*, 9.

³¹ *National Guard Domestic Operations*, 9.

With respect to on-site food distribution in an incident site, Force Support personnel can provide the SPEK. The SPEK is a mass field-feeding platform capable of producing 550 Unitized Group Rations (UGRs). The SPEK is designed to deploy on one aircraft pallet with meals available four hours after arrival. SPEKs reside at 90 ANG bases and across each FEMA region. They were used in Hurricane Katrina and Haiti earthquake relief efforts and SPEKS provided 25,000 meals during the 2008 Presidential Inauguration. The only items not included in the SPEK package are fuel, water, and the UGRs themselves. These additional logistical factors must be considered when employing the SPEK.

Force Support personnel also extend outside their respective bases to the Joint Force Headquarters. Twelve state JFHQs include Joint Force Headquarters Services Teams (JFHQ SV). Services Teams are HQ Staff Augmentation teams aligned by FEMA region. They provide deliberate crisis planning for National Guard forces for food, water, shelter, and fatality management support. They are trained to work with joint and civilian agencies. Two teams deployed to Haiti for Operation Unified Response.³²

Each capability summarized thus far would suffer in the event communication paths into and out of the incident site, amongst first responders, and through the respective JFHQ were broken. The expectation during any complex catastrophe is that all electronic communication paths will be severed or inoperable due to a lack of electricity or damaged transmission apparatus (antennas, cables). This will severely hamper crucial coordination and immediately affect incident responder's ability to save and sustain lives.

ANG communications units can open, restore, and sustain the incident site via three levels of varying capability: Combat Communications Squadrons (CBCS), Engineering and Installation Squadrons (EI) for IT engineering and installation support, and Communications Flights (CF) at every ANG MAJCOM gained wing. CBCS support deployed air expeditionary groups. Consequently, they may provide a robust presence in larger civil support response situations. Central to their function are maintaining expeditionary communications or Theater Deployable Communications (TDC) packages. TDCs can support up to 3000 users and be tailored to meet specific mission needs.

³² Church, author attended briefing, 22 February 2012.

A second scalable communications suite is the Joint Incident Site Communications Capability (JISCC). JISCC is specifically designed to support incident site operations. Each JISCC is C-130 transportable, consisting of 33 separate systems capable of supporting 80 users with cross banding capability to interface multiple radio networks.³³

The multitude of civil support capabilities discussed thus far can be harnessed collectively and employed synergistically via the global airlift capability resident in the ANG. There are on average 70 C-130 and KC-135 aircraft collectively available for surge operations and thus capable of responding to a complex catastrophe (figure 4). Pre-Scripted Response Capabilities is another means to harness this surge capability.

Category	Inventory	Not Utilized For Airlift	Maint Committed	Surge Availability	Postured	Tasked
C-130	181	54	44	33	50	0
C-27	6	0	1	2	3	0
C-5	22	0	10	8	4	0
C-17	11	0	3	4	4	0
KC-135	180	0	78	56	46	0
HH-60G	17	0	5	0	12	0

Not Utilized For Airlift
 *10 of 54 Aircraft Training Coded, gained by AETC
 *36 of 54 Not Coded for Airlift (EC/HC/MC/LC/WC Models)
 *8 of 54 Active Association – AMC Given Aircraft per MOA

Maintenance
 • Programmed Depot Maintenance/Modifications/Isochronal Inspection

Committed
 • Aircraft scheduled to fulfill other requirements (Title 10 etc)

Surge Availability [Inventory – (Not Utilized + Maintenance + Committed)]
 • Educated estimate before working JIEE process and contacting wings
 • Aircraft available to source from the aggregate flying wings

Postured
 • Aircraft and crews sourced and placed into an alert status

Tasked
 • Aircraft flying or completed a mission assignment

Figure 4: Air National Guard Fixed/Rotary Wing Airlift Assets

Source: Col Gary L. Akins, National Guard Bureau/A3D, Domestic Operations Division

In response to civil support events, Pre-Scripted Response Capabilities (PSRC) will be available for posturing to enable quicker responses.³⁴ PSRC provide postured force packages capable of augmenting state active-duty and EMAC agreements. They are scalable depending on the event. They can support forecasted or planned events similar to hurricane evacuations or unplanned events like earthquakes or CBRN responses.

³³ Lt Col William Sherrill (National Guard Bureau/A6CD), author attended briefing, 22 February 2012.

³⁴ Akins, briefing attended by author, 23 February 2012.

PSRC I is the smallest package with four mobility aircraft. It is intended for localized medical evacuation in support of a forecasted or planned evacuation event. On a daily basis, this PSRC can move over 400,000 pounds of cargo, 350 ambulatory and/or 250 litter patients, and prepare 120 patients per day for air transportation.

PSRC II is a small package intended to support locales suffering minimal damage similar to Hurricane Gustav. It utilizes five mobility aircraft and two search and rescue helicopters. PSRC II builds on PSRC I strengths by adding clean mobile power generation, limited search and rescue capability, 150 personnel bed down capability, and wide-band satellite, long-range voice, and data communications.

PSRC III is medium package capable of supporting a localized event similar to Hurricane Ike. Greater mobility aircraft and search and rescue resources allow for increased capacity. On a daily basis, PSRC III can move 800,000 pounds of cargo, evacuate 700 ambulatory and/or 492 litter patients per day, as well as prepare 124 patients for air transportation.³⁵ A ten-bed mobile hospital facility is included as is a 300 personnel bed down capability, and greater capacity for clean mobile power. Tactical air traffic control services round out the package.

PSRC IV is the largest package and is intended for a regional event resulting in significant damage similar to Hurricane Irene. PSRC IV builds upon smaller packages in order to move more than 1,000,000 pounds of cargo, evacuate 1,600 ambulatory and/or 1,000 litter patients, and prepare 120 patients per day for air transportation. Medical resources include a 25-bed mobile hospital facility. Civil engineering personnel can generate greater amounts of mobile power and billet over 400 personnel supporting the response.³⁶

Many of the aforementioned capabilities represent the tip of the collective civil support spear. Everything from logistics, medicine, and the ability to get in and around an incident site are represented. These forces rely on an immense reach back capability to get the right resources to the right place in the least amount of time in order to save and sustain lives. Critical to doing this, is the National Guard Joint Force Headquarters-State (JFHQ-State).

³⁵ Akins, briefing attended by author, 23 February 2012.

³⁶ Akins, briefing attended by author, 23 February 2012.

The DOD cited poor coordination between federal and state partners as a contributing factor to the difficulties encountered in Hurricane Katrina. National Guard personnel from every state participated in response efforts. At the height of the military response, 50,000 National Guard (NG) personnel (Air and Army) and 20,000 federal military personnel supported an unprecedented domestic mobilization.³⁷ Despite immense manpower and resources, the response was disjointed and lacked a unifying level of control. NG and federal military personnel were often unaware where the other was working or what the other was doing. This led to redundant, inefficient efforts and a poorly coordinated response. Furthermore, communication and deconfliction between federal and state responders was poor. The problem was not a lack of resources or manpower. Rather, it was using manpower and resources inefficiently.

Realizing this, the DOD directed the creation of 54 JFHQs, one in each state and territory, to improve federal and state coordination efforts, provide situational awareness to DOD, and provide a means to control both Title 32 and Title 10 forces during large-scale civil support operations. Each JFHQ provides command and control of all ARNG and ANG forces in their respective states and is prepared to provide one or more Joint Task Force (JTF) command element to exercise command and control of military forces to execute assigned missions.³⁸ Additionally, JFHQ are positioned to integrate installation emergency plans within the state.

Each JFHQ develops plans to augment or perform assigned Federal missions as well as provide continuous situational awareness.³⁹ They strengthen unity of effort in domestic operations by providing operational information, through the National Guard Bureau, to the Department of Defense on forces in their respective state.⁴⁰ Furthermore, they coordinate planning, training, and execution of National Guard homeland defense actions, to include defense support of civil authorities, and other domestic emergency missions within the US.⁴¹

³⁷ Government Accountability Office, *Hurricane Katrina: Better Plans and Exercises Need to Guide the Military's Response to Catastrophic Natural Disasters* (Washington DC: Government Printing Office, 25 May 2006), 6.

³⁸ *NG JFHQs-State*, 5.

³⁹ *NG JFHQs-State*, 5.

⁴⁰ *NG JFHQs-State*, 5.

⁴¹ *NG JFHQs-State*, 6.

Each JFHQ-State may conduct operations in state active-duty, Title 32, or Title 10 status, and may render mutual support with Title 10 forces operating within that State. Each JFHQ-State operates under the command and control of the Governor when in state active-duty or Title 32 status. However, State Adjutants General may designate a qualified officer eligible to serve in dual status and thus command both Title 32 and Title 10 forces concurrently. Dual-status officers facilitate unity of effort between state and federal military forces in accordance with guidance from both their respective governors and the President, or their designees.

Summary

This chapter expounded on the UTC and personnel analysis of Chapter 2 to examine the larger specialties resident in the ANG. The analysis suggested the collective efforts of airlift, search and rescue, medical, communications, civil engineering, and force support specialties allow the ANG to “go big” in a complex catastrophe. Used synergistically, the ANG has the capacity to provide a safe and secure environment for local, state, and private sector partnerships to work effectively. These collective specialties are national capabilities comprised of discrete building blocks with unique and specialized attributes. They span many mission sets, are multi-purpose, and can be applied against a complex catastrophic problem to save and sustain lives.

Each of these collective capabilities has one thing in common: short of a federal activation where ANG efforts fall under Title 10 authorities, each governor retains command and control of their respective resources. Several of the civil support capabilities discussed thus far require resources from a number of states to package an effect. For example, scalable PSRC packaging is accomplished by voluntary sourcing from capability holders, some of which are owned by different states. Furthermore, voluntary sourcing of PSRCs remains secondary to state active-duty and EMAC agreements that cross state lines.

Chapter 4 addresses whether the ANG can “go smart.” In other words, can the ANG effectively and efficiently integrate its national capabilities on the scale required in a complex catastrophe? Can the ANG provide a safe and secure environment for local, state, and private sector partnerships to work effectively? The dual status nature of the ANG offers states an excellent first response option. Unfortunately, efforts to integrate

the ANG on the federal level remain problematic. Chapter 4 addresses this issue, examines NLE 11 lessons learned to highlight areas for further development, and offers ANG solutions for complex catastrophes.



Chapter 4

Strengths and Challenges

Chapter 3 demonstrated the ANG can “go big” by providing a safe and secure environment for local, state, and private sector partnerships to work effectively. Chapter 4 examines whether the ANG can “go smart,” meaning that it can work effectively and efficiently. This chapter surveys after action reports (AARs) from NLE 11 and subordinate exercises, National Guard Bureau NLE 2011, and First Air Force’s Ardent Sentry 2011 to determine where ANG resources may have mitigated exercise shortfalls. It will also identify difficulties encountered by the ANG while supporting civil support operations in a complex catastrophic environment. Results indicate that two common areas hindered ANG civil support: sourcing and funding. First, this chapter examines the difficulties associated with sourcing. Sourcing is the mechanism used to provide manpower and resources in a timely manner. Secondly, it expounds on the financial challenges incurred by the ANG as part of civil support operations. The information suggests that while the ANG has the capacity to “go big,” current sourcing and financial hurdles limit its ability to “go smart.”

Sourcing

NLE 11 evaluated catastrophic event preparedness by assessing the ability of the nation’s incident management system to respond to and stabilize areas impacted by a catastrophic earthquake incident within 72 hours.¹ Central to this evaluation was identifying mission critical capabilities and resource gaps, or sourcing. Sourcing entails getting the right capability in the right place in a timely manner to save and sustain lives. Given the size and scope of the NMSZ event, local, county, and state resources were quickly exhausted, as were FEMA and associated federal agency resources.

The NMSZ event required response resources quicker and on a scale far exceeding previous experience. Recall from Chapter 1, federal resources arrive via a resource request and fulfillment process based on a known and validated need. This takes time. Given the impact of a pending humanitarian disaster, and in the interest of

¹ FEMA, “NLE 11,” 1.

time, resources must be pushed, or directed to the incident site, rather than requested. In NLE 11, FEMA recognized the RFA process does not adequately support a push environment.² In fact, several systems, processes, and standard operating procedures proved inadequate in a push environment.³ ANG resources could have mitigated these challenges.

The first challenge entailed billeting Incident Support Base personnel. FEMA stores commodities (water, meals, blankets, hygiene kits, etc.) at eight regional distribution centers throughout the US.⁴ In anticipation of, or in response to, an incident, commodities are forwarded to incident sites and staged out of Incident Support Bases to support state response efforts. During NLE 11, FEMA reported problems billeting the response personnel who serviced the Incident Support Bases. Incident Support Bases receive resources rather than personnel and lack the capacity to provide on-site billeting.⁵ Federal logistics, management, and resource support planners projected 102 hours between request approval and functioning billeting resources for Incident Support Base personnel.⁶ Consequently, Incident Support Base personnel lacked billeting for more than 4 days following the earthquake.⁷

ANG force support and civil engineering personnel could have filled the Incident Support Base billeting shortfall with the Disaster Relief Beddown System (DRBS) and the Single Palletized Expeditionary Kitchens (SPEK). DRBS and SPEK can billet and feed 150 personnel in bare base locations. Contingency Response Group personnel, as part of the Incident Response Hub, can deploy DRBS three hours after notification and, with SPEK, provide meals four hours after arrival. The Incident Response Hub, with indigenous DRBS and SPEK, can fill a 4-12 hour response gap in a domestic crisis thereby eliminating a potential Incident Support Base billeting shortfall inside the 107 hours projected by federal planners.

² FEMA, "NLE 11," 3.

³ FEMA, "NLE 11," 22.

⁴ FEMA, "Incident Support Bases," <http://blog.fema.gov/2011/03/incident-support-bases-spring-flood.html> (accessed 2 May 2012).

⁵ FEMA, "NLE 11," 24.

⁶ FEMA, "NLE 11," 24.

⁷ FEMA, "NLE 11," 24.

NLE 11 highlighted resource gaps in commodity deliver capacity, search and rescue teams, electrical generators, and medical facilities. These shortages hampered affected states ability to provide shelter in place and evacuation missions in a timely manner.⁸ Efforts were further complicated on two fronts: airfield suitability and overland transportation infrastructure. Four days following the incident, questions remained regarding airfield suitability for receiving heavy cargo.⁹ Moreover, the level of road and bridge destruction severely restricted efforts to move commodities from airfields forward to shelter and evacuation site.

The ANG's Initial Response Hub with indigenous Contingency Response Group is capable of quickly assessing airfield suitability enabling Joint Reception, Staging, Onward Movement and Integration (JROSI) in as little as eight hours anywhere in the country. The Initial Response Hub Assessment Team deploys as a first-in force to assess airfield runway and taxiway capability, aircraft parking capacity, and aerial port (logistical) staging capacity. The team is self-contained with all equipment, radios, vehicles, tents, food, and water for five days without resupply. Moreover, in light of potential earthquake damage, the assessment team can survey drop zones or establish additional landing zones to mitigate the loss of over land routes. Unfortunately, even though a known capability in the Contingency Response Group existed, USTRANSCOM failed to launch the Contingency Response Group due to a lack of Mission Assignment (MA) from FEMA.¹⁰

Additionally, FEMA cited a shortage of rotary wing assets available for commodity dispersal.¹¹ Day-to-day ANG operations allow for rotary and fixed wing surge capacity capable of alleviating this shortfall. Given the poor conditions of roads into and out of the incident sites, more than 50 airdrop capable ANG C-130s, C-17s, and HH-60s are available in Pre-Scripted Response Capability (PSRC) packages. Each PSRC constitutes a packaged capability along a gradient of need. Thus allowing an ever widening scope of air drop capability.

⁸ FEMA, "NLE 11", 35.

⁹ Continental United States NORAD Region Headquarters, First Air Force, "Ardent Sentry 2011 After Action Report," 23 August 2011, 7.

¹⁰ First Air Force, "Ardent Sentry 2011 After Action Report," 8.

¹¹ FEMA, "NLE 11," 35.

FEMA search and rescue (SAR) team capacity proved inadequate in NLE 11.¹² Affected states requested more than 125 SAR teams. FEMA's Urban Search and Rescue (US&R) branch consisted of 28 teams resulting in a significant shortfall between requirement and capability.¹³ The ANG has more than 300 SAR trained personnel, to include Guardian Angels and civil engineering personnel. This represents an additional tier of capacity able to save and sustain lives in the first hours following an incident. Unfortunately, ANG SAR assets were held at NORTHCOM awaiting a FEMA mission assignment.¹⁴ The first 72-hours are critical to saving and sustaining lives. A catastrophe of this magnitude does not warrant waiting beyond 72-hours for a MA to surface from the bottom up. To meet FEMA Director Fugate's mandate that interested parties "go big, go fast and go smart," critical lifesaving SAR assets must deploy inside of 72-hours.

States reported a shortage of generators for hospitals and high priority operations.¹⁵ Affected states collectively requested more than 2000 generators, 800 more than FEMA had at their disposal. Four days into the exercise, 108 were deployed to Incident Support Bases.¹⁶ ANG civil engineering forces can provide nearly 100 additional generators to priority facilities to mitigate further shortfalls.¹⁷ While this power generation capability does not resolve the shortfall, it does represent additional capacity available for use. Civil engineering personnel and power generation equipment are air transportable via the Pre-Scripted Response Capabilities packaging concept.

NLE 11 highlighted significant medical shortfalls. ANG resources could have mitigated these shortfalls. Four Disaster Aeromedical Staging Facilities (DASFs) were overwhelmed by the size and scope of humanitarian disaster.¹⁸ DASFs provide for limited critical care and temporary patient holding (1-2 hours) in advance of patient movement to more robust facilities outside the incident area.¹⁹ They require 72-hours to

¹² FEMA, "NLE 11," 39.

¹³ FEMA, "About US&R," <http://www.fema.gov/emergency/usr/about.shtm> (accessed 2 May 2012).

¹⁴ National Guard Bureau "NLE 11," 12.

¹⁵ FEMA, "NLE 11," 40.

¹⁶ FEMA, "NLE 11," 40.

¹⁷ Col Richard Edwards (National Guard Bureau/A7X), briefing attended by author, 23 February 2012.

¹⁸ FEMA, "NLE 11," 47.

¹⁹ USTRANSCOM, "Integrated Training Summit,"

http://www.integratedtrainingsummit.org/presentations/2011/main_training_summit/20_patient_movement_system_continuum_of_care_from_the_patients_perspective.pdf (accessed 2 May 2012).

become operational and can support 140 patients per day. FEMA criticized ANG Mobile Aeromedical Staging Facility (MASF) throughput (40 patients per day) as insufficient in this scenario.²⁰ However, unmentioned were the benefits of operating multiple MASFs. The collective effort of up to eight ANG MASFs utilized in a lily pad scenario one hour following employment could progressively stage patients out of an incident site to larger follow on facilities, thereby augmenting the DASFs.

FEMA also cited a shortage of Disaster Medical Support Teams (DMATS). DMATs are analogous to urgent care facilities consisting of 50-120 members.²¹ They are self-sufficient for up to 72-hours and can care for 250 patients per day.²² While Health and Human Services (HHS) activated 33 DMAT teams, they fell short of the eventual requirement of 58 teams.²³

ANG Expeditionary Medical Support (EMEDS) resources could have mitigated these shortfalls. The EMEDS construct can provide modular, scalable, and rapid response packages capable of caring for 500 to 5,000 patients a day. Furthermore, the EMEDS system is air transportable via the PSRC packaging system.

HHS Disaster Mortuary Response Team (DMORTs) resources and manpower were exhausted due to the size and scope of the humanitarian disaster. DMORTs provide victim identification, processing, preparation, and disposition of remains.²⁴ HHS deployed two teams of men and equipment as well nine additional teams of personnel to affected incident sites. Affected states quickly requested DMORT capacity in excess of HHS capacity.²⁵

ANG Fatality Search and Recovery Teams (FSRT) could mitigate DMORT shortfalls. While the FSRT mission is the search and recovery of fatalities from a CBRNE environment to a coordinated body collection point, all ANG bases have search,

²⁰ FEMA, "NLE 11," 47.

²¹ US Department of Health and Human Services (HHS) "Disaster Medical Assistance Team," <http://www.phe.gov/Preparedness/responders/ndms/teams/Pages/dmat.aspx> (accessed 1 May 21012).

²² HHS, "Disaster Medical Assistance Team".

²³ FEMA, "NLE 11," 47.

²⁴ US Department of Health and Human Services (HHS) "Disaster Mortuary Operational Response Teams," <http://www.phe.gov/Preparedness/responders/ndms/teams/Pages/dmort.aspx> (accessed 2 May 2012).

²⁵ FEMA, "NLE 11," 47.

rescue, and limited Mortuary Affairs (MA) capability. FSRTs respond to mass fatality operations or accidents and can support local, tribal, state, or federal agencies.

While ANG resources represent significant capabilities, they cannot stem the tide of human suffering alone. The point is not attempting to fill every shortfall identified in NLE 11, but show how ANG collective efforts provide an additional means to save and sustain lives immediately following an incident. ANG capabilities in support of a complex catastrophe offer tremendous value given their depth and breadth, but the collective sourcing process beyond the state level into the federal or DOD side is inadequate.²⁶

In order to examine the inadequacies in the sourcing process, the disaster response process as it pertains to the ANG and DOD must be examined (figure 5). The disaster response process begins with the local incident commander (IC). Through the course of the response, the IC attempts to fill requirements at the local level (i.e. local police, fire, and medical personnel). Should local resources prove inadequate, the IC forwards a resource request to state officials at the State Emergency Operations Center (EOC). EOC personnel attempt to fill the request with state resources. This includes state National Guard forces. In the event state National Guard resources cannot fill the shortfall, the state may request National Guard forces from another state through the Emergency Management Assistance Compact (EMAC). While National Guard personnel and equipment are included in EMAC, the vast majority of EMAC resources are civilian derived and sourced.²⁷

²⁶ FEMA, "NLE 11," 24.

²⁷ Col Mark Valentine (J-34, Joint Directorate of Military Support), interview by author, 21 February 2012.

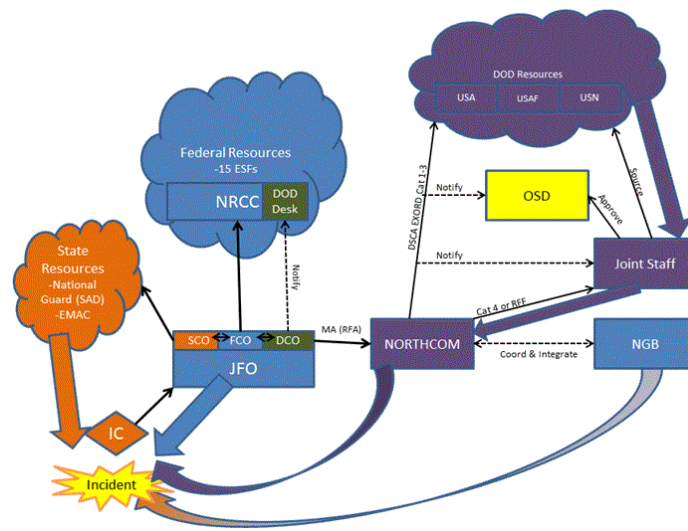


Figure 5: Department of Defense Mission Assignment Process

Source: Col Mark Valentine, J-34, Joint Directorate of Military Support

In the event the incident outstrips state capabilities or capacity, to include those of EMAC, the governor may request federal assistance. The President makes federal assistance available by declaring an emergency in accordance with the Stafford Act. An incident the size and scope of a complex catastrophe will involve a Stafford Act emergency declaration. This declaration is the trigger by which the federal community stands up a Joint Field Office (JFO) to coordinate federal response actions.²⁸

Three positions within the JFO are of importance: the State, Federal, and Defense Coordinating Officers (SCO, FCO, and DCO). The principal state official in the JFO is the State Coordinating Officer (SCO). The SCO prioritizes state requests to the federal government on behalf of the Governor.²⁹ The chief federal official in the JFO is the Federal Coordinating Officer (FCO). FCO coordination efforts with ESF leads in the JFO and FEMA officials at the National Response Coordination Center (NRCC) ensure the most timely and efficient resource are selected to satisfy state requests.³⁰

Should the collective efforts of all ESFs prove inadequate, the FCO consults with the Defense Coordinating Officer (DCO) for DOD assistance. A DCO resides in each

²⁸ Valentine, interview by author, 21 February 2012.

²⁹ *DSCA Handbook*, E-1.

³⁰ *DSCA Handbook*, E-1.

FEMA region. The DCO and attached Defense Coordinating Element (DCE) assess each request according to four criteria: is the request militarily appropriate; were other options exhausted; what are the risks of using military forces; and will military use substantially affect readiness or pose legal issues.³¹ If the request satisfies these criteria, the DCO declares the request valid, provides a cost estimate to JFO comptrollers, and forwards it to the responsible Combatant Command, either NORTHCOM or PACOM depending on where the request is needed.³²

At this point, the combatant commander (CCDR) may coordinate with the National Guard for support. DSCA execution order (EXORD) and DOD 3025.18 allow the Chief, National Guard Bureau to advise the CCDR on support planning and coordination of National Guard forces as part of DSCA.³³ At this stage, a request could be assigned to NG forces (operating under Titles 10 or 32).

The COCOM takes the resource request, known as a Mission Assignment (MA), and initiates the sourcing process. The CCDR, in accordance with the DCSA EXORD, may assign forces to execute the MA under four different categories. Category 1 personnel are primarily COCOM staff already assigned to the COCOM. Following SECDEF notification, they can be included in a prepare-to-deploy order (PTDO) or deployed. Category 2 resources are pre-identified force packages traditionally requested during disaster response operations. Similar to Category 1, SECDEF notification is required prior to PTDO or deployment with SECDEF approval required prior to employment. Category 3 resources are enablers, specifically command and control assets. SECDEF notification is required to place category 3 resources on a PTDO, deploy, or employ. Furthermore, a RFA or MA is not required to use category 3 forces. Category 4 forces are large-scale response forces. SECDEF approval is required to place on a PTDO. However, deployment and employment authority will arrive under a separate EXORD.³⁴

Requests involving Category 2 or 4 forces require further sourcing at the Joint Staff. J-31 utilizes the Global Force Management Allocation Process (GFMAP) to

³¹ Valentine, interview by author, 21 February 2012.

³² *DSCA Handbook*, E-2.

³³ *Defense Support of Civil Authorities*, 14.

³⁴ Valentine, interview by author, 21 February 2012

canvas force providers for requested capabilities and forces. The GFMAP is essentially a spreadsheet of UTCs agnostic to service.³⁵ No mention is made of whether a particular UTC is associated with active-duty, ANG, or reserves. Should the mission require separate orders, the Joint Directorate of Military Support (JDOMS) in J-34 completes the task and ultimately provides the path for SECDEF approval.³⁶ The Office of the Assistant Secretary of Defense for Homeland Defense and American Security Affairs (ASD/HD-ASA), in conjunction with the sourcing process, notifies the SECDEF and, if required, obtains approval.

The current sourcing process highlights a number of issues. Once a request comes to DOD, the process assumes the National Guard is done, or unable to participate further. This is because the system assumes all requests come from the bottom up. This is not always the case. Sometimes, given the size and scope of the incident, FEMA or DOD mandate forces from the top down. In this instance, National Guard forces in state active-duty or Title 32 are not considered in the sourcing process. For example, in Hurricane Irene, DOD received a top down mission assignment for Title 10 forces. However, thousands of NG forces were in place up and down the east coast and capable of providing assistance.³⁷

Theoretically, the current DSCA Execution Order (EXORD) allows the CCDR to coordinate and integrate support plans with the Chief, National Guard Bureau.³⁸ In practice, this has not been the case. In NLE 11 FEMA coordinated directly with the Office of the Secretary of Defense (OSD) to request mission assignments. Furthermore, NORTHCOM acted on mission assignments without coordinating with National Guard to determine if the National Guard could fill requests.³⁹ However, DSCA allows for National Guard coordination. Eliminating the Air Guard from the sourcing discussion is inefficient and results in poor unity of effort.

The National Guard Bureau must codify a process by which Air Guard forces are better integrated into DSCA. For instance, NORTHCOM J3 could establish a process in

³⁵ Valentine, interview by author, 21 February 2012.

³⁶ *DSCA Handbook*, E-3.

³⁷ Valentine, interview by author, 21 February 2012.

³⁸ Valentine, interview by author, 21 February 2012.

³⁹ National Guard Bureau "NLE 11," 7.

which the National Guard is provided the right of first refusal to accept a mission assignment before NORTHCOM pursues Title 10 sourcing through the GFMAP.⁴⁰ In this process, NORTHCOM would contact the National Guard Coordination Center, as part of DSCA, and coordinate for Air Guard resources. If the Air Guard were capable of executing the mission assignment, NORTHCOM would forward the mission assignment to the National Guard Coordination Center for execution. Conditional to acceptance is the requirement that ANG undertake the mission assignment in state active-duty. Thus, it no longer is a federal (DSCA) issue. Formalizing this process would require a revision to the DSCA directive, DODD 3025.18, or a codification of standard operating procedures within affected COCOMs and National Guard Bureau. The NORTHCOM deputy commander is traditionally a national guardsman so a point of influence exists within NORTHCOM to socialize, exercise, and codify this revised process. Critical to this suggested process are the roles and responsibilities of the National Guard Bureau and the National Guard Coordination Center.

In theory, the National Guard Coordination Center and ANG Crisis Action Team (CAT) coordinate the use of ANG assets between the Air Guard, states, and federal agencies to ensure requesting agencies receive support either as part of National Guard Civil Support or DSCA. The National Guard Coordination Center provides NORTHCOM, as part of DSCA, with situational awareness regarding ANG force emplacements while the CAT coordinates force support at the unit level.

Request for Assistance (RFA) arrive in the National Guard Coordination Center via an automated message system, the Joint Information Exchange Environment (JIEE). National Guard Coordination Center officials, to include Army and Air Guard liaison officers, filter the request via JIEE through the Army Guard Watch facility or ANG CAT for appropriate sourcing. Crisis Action Team personnel, including functional managers knowledgeable of ANG personnel and equipment status, coordinate between their liaison officers and respective JFHQ personnel to provide ANG assets for missions. The National Guard Coordination Center and CAT do not command, but rather synchronize. Each state's JFHQ provides the command and control of National Guard forces for its governor.

⁴⁰ Valentine, interview by author, 21 February 2012.

In practice, two elements hinder this process: the National Guard Coordination Center's Apportionment Cell and the ability of affected states to share information with the National Guard Coordination Center. The Apportionment Cell collects all National Guard, interagency RFI/RFA, and mission assignment requests, apportions, and routes requests through the respective CAT or Watch Facility for execution and tracking. In NLE 11, the cell was ill prepared to manage the volume of RFIs, RFAs, EMACs, and mission assignments.⁴¹ The National Guard Bureau cited a lack of sufficiently trained personnel to support the volume of requests.⁴²

The National Guard Bureau must take actions to strengthen the performance of the apportionment cell. This is of particular importance should the Guard earn the right of first refusal as part of DSCA. Beyond dealing with individual states, mission assignments emanating from affected COCOMs are sure to add another level of coordination and deconfliction to the mix. If the SECDEF's mandate holds true regarding no additional force structure to combat complex catastrophes, then the Guard must augment existing apportionment cell manning with existing personnel. These personnel may come from the Army or Air National Guard Readiness Centers or National Guard Bureau Joint Staff. Furthermore, formal procedures and periodic training opportunities must exist to bolster what little time augmentees spend in the apportionment cell.

Formal procedures could include a document encapsulating the role, mission, processes, and points of contacts (POCs) necessary to bring the right of first refusal process to fruition. This would include POCs at the respective COCOMs, each JFHQ, FEMA, and DOD to ensure adequate communication paths exist to ensure unity of effort. Furthermore, these procedures should be exercised as part of each Vigilant Guard exercise conducted throughout the year.

Vigilant Guard is a domestic emergency exercise program sponsored by NORTHCOM in conjunction with the National Guard Bureau. Each exercise allows JFHQs and subordinate units the opportunity to better cooperation and operational relationships with civilian, federal, and military partners. In order to establish and

⁴¹ National Guard Bureau "NLE 11," 8.

⁴² National Guard Bureau "NLE 11," 8.

strengthen this revised Guard sourcing process, the Vigilant Guard aperture must be opened to include the National Guard Coordination Center and apportionment cell particularly. This provides a means by which the revised Guard DSCA sourcing process can be institutionalized amongst all players. Repetitive exercising, manning augmentation, procedural codification, and the presence of an influence point in the NORTHCOM deputy commander are key to solidifying a revised NG DSCA sourcing process. Unfortunately, recent struggles with shared situational awareness may hamper this evolution.

In NLE 11, the National Guard Coordination Center lacked awareness of the size, shape, and resources deployed via state-to-state EMAC agreements. Affected states reported less than half of all EMACs through JIEE.⁴³ States routinely failed to report status or other key tracking information to the National Guard Coordination Center. Furthermore, both the states and National Guard Coordination Center lacked a shared situational awareness construct identifying critical state based civil support capabilities. In short, neither entity was operating on the same page. This complicated unity of effort and presented a less than optimum picture of ANG capabilities.

While a small number of operational connectivity issues hampered the exchange of data in JIEE, the larger issue was simply a lack of utilization by states and the National Guard Coordination Center.⁴⁴ Many states failed to utilize JIEE or post EMAC information simply due to unfamiliarity with the system. This is result of the JFHQ construct. The SECDEF mandated JFHQs in each state and territory following Hurricane Katrina in an effort to harness the NG's state level expertise and provide a construct to facilitate greater unity of effort via a dual status command apparatus. Unfortunately, with the mandate came no additional manpower and many JFHQ billets came out of the hide of each state. Consequently, many state headquarters personnel are double-and triple-hatted to cover mandated requirements. As such, when JFHQ personnel undertake an exercise or event similar in size and scope to a complex catastrophe, they are unfamiliar with the finer processes required to make the system work effectively. Hence, the less than adequate reporting and JIEE utilization rates in NLE 11.

⁴³ National Guard Bureau "NLE 11," 7.

⁴⁴ National Guard Bureau "NLE 11," 9.

Four things must take place to rectify these issues. First, the National Guard Bureau must impress upon states the importance of this medium of exchange. It is in the best interest of each state and territory to subscribe to JIEE since it is the means through which resources may flow quickly and efficiently in a time of need. By utilizing JIEE, the collective power of the ANG can be harnessed to respond in a state or regional crisis. States electing not to participate run the risk of delayed or ineffectual resource allocation in their time of greatest need. Second, the current JIEE construct must be strengthened. Each entity, to include every JFHQ, National Guard Coordination Center, and FEMA, must have access to, and push information to, a web-based, interoperable, display that catalogues ANG civil support resources from throughout the country. This display should include equipment and personnel status and availability. Third, this strengthened JIEE construct must be exercised as part of Vigilant Guard. Once again, the aperture must be opened to include the National Guard Coordination Center so states become more conditioned to communicating, particularly JFHQs, with the National Guard Coordination Center in all scenarios. Two-way communication is vital so both ends of the data exchange must exercise thoroughly. Lastly, NGR 500-1/ANGI 10-8101, *National Guard Domestic Operations*, should be amended to include verbiage establishing JIEE as the program of record for real time processing and RFI/RFA tracking.

Issues involving the National Guard Coordination Center and the frequency and methods by which states communicate with the National Guard Coordination Center are symptomatic of a larger issue: the role of the National Guard Bureau and states in civil support operations. Many of the problems discussed thus far amount to simply knowing what capabilities are available at any given time in order to meet another state's need or assume a mission assignment from the COCOM. To date, states are not compelled to communicate with the National Guard Bureau on day-to-day issues. In fact, the Chief, National Guard Bureau has no authority to command the NG (states) and lacks command authority over the NG. However, the Chief, National Guard Bureau is the channel of communication to the Adjutants General and may direct the NG on matters regarding

force structure, training, and appropriations.⁴⁵ When operating in state active-duty or Title 32, there are 54 separate air forces throughout the country, one for every state and territory. States conduct the vast majority of civil support in state active-duty or Title 32 status. The respective governor through the Adjutant General leads them in this effort.

The National Guard Bureau is not a force provider. This role belongs to the parent service, in this case the Air Force. The National Guard Bureau exists to standardize ANG training for the reserve component of the Air Force, not for real world execution. Civil support is a real world mission. Once the National Guard Bureau provides the resources to train and ready the ANG, the Air Force assumes the mantle for real world execution.

However, the National Guard Bureau Charter, the document that outlines National Guard Bureau's roles and responsibilities, is open to interpretation on this matter. In it, the National Guard Bureau is charged with "facilitating and coordinating with the...Department of the Air Force the use of National Guard Personnel and resources for contingency operations, Military Operations Other Than War, natural disasters, Military Support to Civil Authorities, and special events."⁴⁶ The suggestion is since the National Guard Bureau coordinates with the Air Force for NG personnel and resources in natural disasters, the National Guard Bureau should be able to communicate or expect communication from the states to ascertain state capabilities in order to assist the Air Force.

Additionally, the charter mandates the National Guard Bureau monitor and assist the "States in the organization and maintenance and operation of National Guard units so as to provide well trained and well equipped units capable of augmenting active forces in time of war or national emergency."⁴⁷ Given their destructive capacity, complex catastrophes could represent a national emergency. If so, this is evidence states should communicate with the National Guard Bureau in a national emergency so the National Guard Bureau may provide assistance to states. Furthermore, NGR500-1/ANGI 10-8101, *National Guard Domestic Operations*, stipulates the National Guard Bureau will

⁴⁵ *National Guard Domestic Operations*, 1.

⁴⁶ Army Regulation 130-5/AFMD 10, *Organization and Functions of National Guard Bureau*, 30 January 2002, 4.

⁴⁷ *Organization and Functions of National Guard Bureau*, 3.

facilitate assistance to states by locating and coordinating NG units and resources.⁴⁸ Consequently, the National Guard Bureau and, by extension, the National Guard Coordination Center is attempting to straddle the line between training the ANG for its parent service and taking a role in real world operations, albeit those domestic in nature.

A number of steps must be taken to rectify this ambiguity. First, if the aforementioned DSCA sourcing process comes to fruition, the National Guard Bureau charter must be amended. Verbiage should define the roles and responsibilities of the National Guard Coordination Center in civil support operations. Second, if the states are to shoulder a greater responsibility in civil support operations, vice depending upon the federal government, and the ANG remains primarily a state entity, then states must communicate to the National Guard Coordination Center to harness the collective power of the ANG to benefit all states.

Similar issues concern the states. States, which were previously beholden to themselves and the training of their resident forces, are now expected to communicate with National Guard Bureau for real world execution vice simply matters of training and readiness. Complicating matters for National Guard Bureau is the fact that each state controls their respective assets. Much of the collective abilities resident in the ANG en masse, for example the PSRCs, are predicated on voluntary sourcing from the respective states' adjutant general (with governor consent). National Guard Bureau cannot force states to participate in collective civil support efforts. Of course, states have a vested interest in assisting their fellow states since the time will come when they will require assistance themselves.

DODD 5105.83 states the Chief, National Guard Bureau through the National Guard Coordination Center will provide, "liaison and shared situational awareness capability and serve as a channel of communications among the NG JFHQs-State, the Joint Staff, the Combatant Commands, the Military Departments, and the OSD Components...when the NG JFHQs-State are operating under the command and control of their respective Governors."⁴⁹ This solidifies the mandate for the National Guard Coordination Center to act as a coordinating entity to and from the states.

⁴⁸ *National Guard Domestic Operations*, 3.

⁴⁹ *NG JFHQs-State*, 10.

Furthermore, the CNGB through the National Guard Coordination Center will, “assist the NG JFHQs-State, with the consent of the Governors, by facilitating mutual support among the States to the extent allowed by law. Help establish unity of effort by facilitating the integration of State NG and DOD planning and other activities.”⁵⁰ In this capacity, given the appropriate tools, the National Guard Coordination Center may integrate and deconflict state assets both between states and with agency partners thus improving efficiency and unity of effort

Additionally, each “NG JFHQ-State shall liaise with and shall provide situational awareness among the States, and through the National Guard Bureau, to the Department of Defense during domestic operations in which State-controlled NG forces and State intergovernmental and interagency organizations are participating.”⁵¹ States must now communicate their capabilities and force disposition to National Guard Bureau, through the National Guard Coordination Center, so governmental partners are made aware of and afforded the opportunity for adequate deconfliction. Key to this undertaking is the role played by the JFHQ-State.

Each JFHQ-State is the respective governor’s agency for coordinated NG planning, training, and execution for...defense support of civil authorities and other domestic emergency missions within the United States.⁵² State Headquarters must improve the communication path to the National Guard Coordination Center to ensure a coordinated effort should other states request resources through EMAC or the collective efforts of the ANG are required for a complex catastrophe.

The large-scale ANG sourcing process required in a complex catastrophe, while functional in theory, lacks efficiency in practice. Despite assertions to the contrary, no mechanism exists for the COCOM to source the ANG directly prior to moving on to Title 10 forces in the event a top down mission assignment is required. A complex catastrophe will require a top down sourcing process to save and sustain life. Many of the shortfalls presented by FEMA in NLE 11 could have been mitigated by ANG forces had the ANG been given the right of first refusal from the COCOM.

⁵⁰ *NG JFHQs-State*, 11.

⁵¹ *NG JFHQs-State*, 13.

⁵² *NG JFHQs-State*, 7.

However, even had a better process existed, performances by the National Guard Coordination Center and affected State JFHQs in NLE 11 indicated they were unable to handle the flood of information in a complex catastrophic environment. Current National Guard Coordination Center process management and manpower limitations hindered efforts aimed at solidifying unity of effort and asset deconfliction. Furthermore, inadequate communication by states via JIEE complicated efforts to consolidate force disposition. Common to both entities was the lack of shared situational standards. No program or process existed from which all interested partners could speak authoritatively on who was doing what, where and when.

Funding

A common complaint registered by the National Guard Bureau during the course of NLE 11 was the lack of standardization across the states and OSD for transitioning from state active-duty to federal active duty in order to pay for ANG support in complex catastrophe. This led to a disjointed and untimely approval process.⁵³ Recall that ANG forces participating in state civil support actions initially do so in state active-duty. In state active-duty, the respective governor through state funds pays for their use. Once the president declares an emergency as part of the Stafford Act, states are eligible for funding assistance from the federal government thereby alleviating the long-term impact to state coffers. This declaration paves the way for respective governors to request through the SECDEF for ANG forces to work under 32 U.S.C. § 502(f) authority.

Section 502(f) authority allows the ANG to operate at federal expense but remain under state control for training or other duty.⁵⁴ Title Section 901 expands the phrase “other duty” to include homeland defense activities the SECDEF determines to be necessary and important.⁵⁵ Homeland defense includes “military protection of territory and domestic population...or of the infrastructure or assets...determined by the Secretary of Defense as being critical to national security.”⁵⁶ This authority allows the DOD to pay for those ANG forces participating in response efforts vice the affected governor. However, the DOD is hesitant to do so for a several reasons.

⁵³ National Guard Bureau “NLE 11,” 7.

⁵⁴ 32 U.S.C. § 502.

⁵⁵ 32 U.S.C. § 901.

⁵⁶ 32 U.S.C. § 901.

DOD does not technically have funds set aside to pay for this. Any DOD funds obligated for civil support action is a bill to the DOD. This bill impacts previously appropriated obligations thereby forcing a cut or debit to offset the civil support cost. DOD can re-coup some civil support costs once a Stafford Act declaration is made.

Upon a Stafford Act declaration, the Disaster Relief Fund (DRF) is made available to reimburse responding entities. The DRF is a source from which FEMA can “direct, coordinate, manage, and fund eligible response and recovery efforts associated with domestic major disasters and emergencies that overwhelm State resources. Through the DRF, FEMA can fund authorized Federal disaster support activities as well as eligible State, territorial, tribal, and local actions.”⁵⁷ DRF Federal assistance can supplement state resources in the event the disaster is beyond the state’s capacity to respond.⁵⁸ The FY13 DRF request included \$5.4 billion for major disasters declared pursuant to the Stafford Act.⁵⁹

DRF funds do not cover all disaster expenses. They are allocated on a cost share basis. The federal share is 75 percent with the affected state responsible for the remaining 25 percent. With respect to the DOD, FEMA can reimburse 502(f) funding through the DRF but at a less than optimal rate. FEMA only reimburses DOD for 502(f) expenditures up to per diem and travel (excluding pay and allowances). FEMA is prohibited from reimbursing another agency for which Title 32 appropriations already exist.⁶⁰ For example, in 2011, the DOD accepted 14 mission assignments costing \$17 million.⁶¹ Consequently, the DOD assumed the risk of recouping from FEMA markedly less than \$17 million as well as incurring a shortfall in pre-existing appropriations.

Another option open to governors entails utilizing their ANG forces in state active-duty. FEMA has no reimbursement prohibitions similar to those with DOD when reimbursing governors for state active-duty ANG resources. State active duty expenditures may be recouped through the DRF for up to 75 percent with the state shouldering the remaining 25 percent. Additionally, states may request, subject to

⁵⁷ Department of Homeland Security, “Federal Emergency Management Agency, Disaster Relief Fund, Fiscal Year 2013 Congressional Justification,” 1.

⁵⁸ Disaster Relief Fund, FY13, 1.

⁵⁹ Disaster Relief Fund, FY13, 1.

⁶⁰ Valentine, interview by author, 21 February 2012.

⁶¹ Federal Emergency Management Agency, HQ & DOD Mission Assignment Historical Analysis 2011, 4.

presidential approval, a federal cost share up to 90 percent in situations where the state suffers immense economic distress.⁶²

However, the prospect of shouldering the remaining 10-25 percent of state active-duty costs may be prohibitive in some instances, particularly when governors are faced with budget deficits. Additionally, state active-duty costs vary from state to state. Each state has a different methodology for compensating state active-duty personnel. For some states, state active-duty pay equals basic pay received on federal duty while for others it is a multiplier of the federal minimum wage. While the method of computation varies, often times one day of state active-duty pay equals roughly what a member would accrue working a single day federal active-duty. Budget concerns to the contrary, in 2011 governors elected to use their ANG forces in state active-duty status by a margin of three to one when responding in a civil support capacity.⁶³ Furthermore, utilizing ANG forces in state active-duty, with DRF reimbursement, takes away the need to coordinate for 502(f) authority and the associated uncertainty over whether DOD will provide 502(f) funds.

Should governors elect to forgo state active-duty funds and the uncertainties associated with the section 502(f) approval process, they can utilize the resources authorized under 32 U.S.C. 502(a) in civil support operations. Section 502(a) authority provides the resources for ANG personnel to train for their federal mission. This includes up to 48 training days a year with an additional 15 days a year allocated for exercises.⁶⁴ Governors retain control of their respective ANG assets under this authority while the cost of training for the federal mission is borne by the federal government. On occasion, training allocations normally set aside for the federal mission are used to provide civil support. This was the case during Hurricane Irene when 1,568 ANG personnel provided civil support under section 502(a) authority.⁶⁵

This approach entails some degree of risk. Finite resources intended to support training for federal missions are reduced when used in real-world civil support scenarios. The ANG can get the job done, but at the cost of being prepared for the federally

⁶² Disaster Relief Fund, FY13, 9.

⁶³ Franklin, interview by author 24 February 2012.

⁶⁴ 32 U.S.C. § 502 (a)(1)(2).

⁶⁵ Franklin, interview by author 24 February 2012.

mandated mission. Fortunately, parallels exist between civil support tasks and federal missions. Air mobility, medical, CE, and SAR, all undertaken as part of federal wartime missions, are required in civil support. Providing civil support under 502(a) authority, in most cases, adequately prepares ANG personnel for their federal mission.

The most important issue regarding 502(a) resources are their finite nature. At some point, depending upon the frequency of use in a civil support environment, these training resources are exhausted. This could take place anytime in the fiscal year and potentially leave a gap of time in which no federal training resources are available. This situation is analogous to a unit flying hour program. When the hours are finished, so is the flying, irrespective of the time of year.

However, in reality, a unit will appeal to a higher authority for more hours to continue training. The same can be said in this situation. This authority provides a pot of resources from which the states may draw assuming some level of federal training takes place as part of their use. Additionally, because they are appropriated resources, DOD does not incur an additional bill when used in the civil support environment.

Summary

NLE 11 highlighted a number of areas where ANG civil support actions could have mitigated resulting shortfalls in a complex catastrophe. ANG Pre Scripted Response Capabilities, Initial Response Hub, and Contingency Response Group forces can provide additional capacity to allow a safe and secure environment for local, state, and private sector partnerships to work effectively in a complex catastrophe. However, sourcing and funding issues do not allow the ANG to “go smart,” or work efficiently.

ANG personnel, at the behest of their governor, can effectively provide first responder expertise within their state or neighboring states through EMAC. The greater challenge arises when the collective capacity of the ANG en-masse must be brought to bear in a situation requiring concentrated resources. Having the capacity, or resources, is not the issue. The issue lies in the mechanism that packages the resources. Difficulties arise when resources are required above the EMAC level. Communicating, coalescing, and deconflicting resources through the National Guard Coordination Center remains a challenge.

The DSCA sourcing process as it applies to National Guard forces is inadequate. The coordination path between the COCOM and National Guard Bureau as part of DSCA, while established in theory, is less than ideal in practice. Both sides of the aisle are ill prepared for proper coordination. The COCOM lacks the process to work directly with National Guard Bureau and the National Guard Coordination Center lacks the procedural framework, manpower, and resources to know what is required, when it is needed, and how to consolidate forces to effect strong unity of effort and efficiency.

States shoulder similar responsibilities and are equally culpable. State JFHQs are the key node for state planning, force disposition, and situational awareness. The National Guard Coordination Center's operating picture is only as good as the information provided by the individual states. Additionally, since each state has its own air force, states must be willing to offer their resources to the National Guard Coordination Center for the collective good of the ANG if the ANG is to harness the multitude of specialties that are so adept in the complex catastrophic environment. The states willingness to do so is not really the issue at hand, more importantly it is an issue of funding.

Several funding authorities exist to effect civil support success, each with their own advantages and disadvantages. Pursuing 502(f) authority under Title 32 through the SECDEF is problematic given the questions of reimbursement and impact to current appropriations. Utilizing section 502(a) authority reduces the need for DOD approval, allows for rapid response, and yet runs the risk of affecting training resource allocation for federal missions. Finally, state active-duty offers the surest path to reimbursement for ANG costs. A Stafford Act declaration allows governors to recoup 75 percent of their costs, or up to 90 percent, depending upon the severity of the event.

Conclusion

The ANG can go fast, go big, and go early, but cannot go smart in a complex catastrophe. It can respond quickly and timely to save and sustain lives but lacks the mechanism to employ its substantial capacity efficiently. In arriving at this conclusion, four questions were answered. First, does the ANG possess unique and specialized capabilities, capable of spanning many missions, and are multi-purpose? Analysis of ANG UTCs and personnel against Department of Homeland Security core capabilities, FEMA regions, and emergency support functions suggest ANG capabilities are unique and specialized. Air Guard capabilities are not specific to the civil support mission, but are additive because they are dual use. They may be used for either the federal warfighting mission or civil support mission, thus they are multipurpose. Furthermore, these capabilities are unique because they are well suited for the states and their governors or the president on a federal level in response to a complex catastrophe. Lastly, metrics suggest UTC variances allow the Air Guard to cover many mission sets that align with federal civil support requirements.

Second, can the ANG arrive quickly and provide a safe and secure environment for local, state, and private sector partnerships to work effectively? The depth and breadth of national capabilities, coupled with geographic dispersion, suggest the ANG has substantial capacity to combat the challenges inherent in a complex catastrophic environment. The collective efforts of airlift, search and rescue, medical, communications, civil engineering, and force support specialties allow the ANG to “go big” in a complex catastrophe. Consequently, they can arrive quickly and provide a safe and secure environment for local, state, and private sector partnerships to work effectively.

Third, can the ANG leverage its capabilities across FEMA regions vice simply in and around local bases? How and where ANG capabilities exist within each FEMA region allows for greater flexibility and reduced response timelines since a wider variety of forces and facilities are available for use. In addition, since the majority of these resources are dual use, they are available not only for federal wartime missions but for civil support use as well. Lastly, since ANG forces are state controlled on a day-to-day

basis, they are more responsive than federal forces that remain beholden to particular request thresholds prior to utilization. The ANG can leverage existing immediate response authority so continental United States (CONUS) forces and facilities may be used regardless of what their primary purpose is if directed by the president to save American lives. This cumulatively suggests the ANG can “go fast and go early.”

Lastly, where should the ANG reside in an integrated DOD wide effort to bring forces to bear in a timely fashion should governors ask for support? The existing civil support mechanism is adequate for events short of a complex catastrophe. Air Guard resources exist in each state and territory. States can assist each other through emergency management assistance compacts. Guard resources, under state active-duty, can respond quickly. The greater issue arises when the full capacity of the Air Guard must be brought to bear in a complex catastrophe.

DSCA most assuredly will be required in a complex catastrophe. The existing DCSA construct, or sourcing plan, is inadequate. If the National Guard and reserve components are to shoulder a larger share of civil support responsibilities, as suggested by the DOD, then the integration and support path between the COCOM and National Guard Bureau must be refined. Specifically, if FEMA solicits assistance from the DOD, through the affected COCOM, the COCOM J3 should offer National Guard Bureau (in the guise of the Apportionment Cell within the National Guard Coordination Center) the right of first refusal for mission assignments. This does two things. First, it reduces the likelihood of ANG forces going unused as shown during Hurricane Irene. Second, it allows the DOD to push a larger portion of the civil support role to the reserve component with the intent of maximizing ANG use prior to sourcing Title 10 forces.

Similarly, should the ANG accept a mission assignment, it should be done in state active-duty status. This does several things. First, it eliminates any uncertainty regarding 502(f) funding since the DOD is less inclined to approve 502(f) authority in light of FEMA’s current reimbursement rate. Second, it reduces the impact to 502(a) training resources. These resources are finite and intended to train ANG forces for their federal mission. Third, state active-duty allows affected governors, pending a Stafford Act declaration, 75 percent reimbursement with allowances for up to 90 percent depending upon the level of destruction.

Furthermore, the National Guard Coordination Center and respective state JFHQs must improve their ability to communicate and synthesize civil support information if the ANG is to gain a larger share of the responsibility in DSCA. Each entity must contribute to and monitor a strengthened JIEE construct. This web based interactive display of ANG civil support assets will permit supported and supporting entities improved situational awareness thereby alerting interested parties of the types of resources in play, available, or requested. It will strengthen unity of effort, as well as efficiently maximize the use of ANG forces throughout the country. Under this revised construct, should the ANG turn down a mission assignment, the understanding will be the ANG has effectively exhausted its civil support capabilities. Title 10 forces will then fill the need and the ANG will no longer be considered part of the sourcing solution.

Collectively, these actions do several things. Governors and resident ANG forces will shoulder a greater burden as state entities. The ANG, through its collective capacity to act and inherent dual use equipment will offer an existing cost effective solution. The DOD achieves its goal of emphasizing reserve component civil support competencies and reducing the impact to Title 10 forces. Additionally, DOD financial obligations are reduced since affected governors, by placing their ANG forces in state active-duty authority, will receive greater reimbursement from FEMA vice under 502(f) authority.

Presidential Policy Directive-8 directed a whole of community approach to national preparedness. The assumption that the federal government will carry the day is no more. Local communities and states must make a concerted effort to respond immediately in a complex catastrophe. To be sure, the federal government will assist, but it cannot react as quickly as the affected states. The ANG, due to its unique dual mission, effectively straddles the line between a federal and state entity. In light of this, and due to its presence in hundreds of local communities, the ANG is best positioned to provide a substantial civil support presence anywhere in the country. State active duty ANG resources emanating through a revised sourcing process (from the COCOM through the National Guard Coordination Center to the apportionment cell) on a strengthened interactive, web-based JIEE backbone (mandated as a program of record) is the best means to provide the full the breadth and depth of the ANG in the most timely manner. This paves the way for the ANG to “go smart” in a complex catastrophe.

Bibliography

- 10 U.S.C. § 331, 334 (2009).
- 10 U.S.C. § 10102 (2009).
- 10 U.S.C. § 375 (2009).
- 10 U.S.C. § 331-335 (2009).
- 10 U.S.C. § 10107, 10113 (2009).
- 18 U.S.C. § 1385 (2009).
- 32 U.S.C. § 502 (2009).
- 32 U.S.C. § 901 (2009).
- 32 U.S.C. § 101 (2009).
- 32 U.S.C. § 325 (2009).
- 33 U.S.C. § 701n (2012).
- 42 U.S.C. § 5121 (2009).
- 6 USC § 101-596 (2011).
- Air Force Civil Engineering Support Agency. "United States Air Force Prime Beef Units," <http://www.afcesa.af.mil/shared/media/document/AFD-090227-115.pdf> (accessed 1 May 2012).
- Air Force Civil Engineering Support Agency. "United States Air Force Red Horse Squadrons," <http://www.afcesa.af.mil/library/factsheets/factsheet.asp?id=16723> (accessed 1 May 2012).
- Air Force Instruction (AFI) 10-244. *Air National Guard, Reporting Status of Aerospace Expeditionary Forces*, 2 December 2008.
- Air Force Instruction (AFI) 10-244. *Reporting Status of Aerospace Expeditionary Forces*, 27 September 2010.
- Air Force Instruction (AFI) 10-401. *Air Force Operations Planning and Execution*, 7 December 2006.
- Air Force Instruction (AFI) 10-802. *Military Support to Civil Authorities*, April 2002.
- Air Force Policy Directive 10-8. *Homeland Defense and Civil Support*, September 2006.
- Akins, Col Gary L. (National Guard Bureau/A3D), briefing attended by author, 23 February 2012.
- Army Regulation 130-5/AFMD 10. *Organization and Functions of National Guard Bureau*, 30 January 2002.
- Bancroft, Maj Bruce (123d Contingency Response Group), interview by author, 22 February 2012.

Church, Nathaniel (National Guard Bureau/A1SC), author attended briefing, 22 February 2012.

Col Gregory Nelson, “Initial Response Hub Concept of Operations (CONOPS),” 31 January 2012.

Continental United States NORAD Region Headquarters, First Air Force, “Ardent Sentry 2011 After Action Report”, 23 August 2011.

Department of Defense. *DSCA Handbook, Defense Support of Civil Authorities Handbook: Tactical Level Commanders and Staffs Toolkit, Liaison Officer Toolkit On Back Cover*. Washington DC: Government Printing Office, 30 July 2010.

Department of Defense. *DSCA Handbook, Defense Support of Civil Authorities Handbook: Tactical Level Commanders and Staffs Toolkit*, 30 July 2010. Washington DC: Department of Defense, 2010.

Department of Defense. *National Guard and Reserve Equipment Report for FY 2012*. Washington, DC: Department of Defense, 2011.

Department of Defense. *Strategy for Homeland Defense and Civil Support* (Washington DC: Department of Defense, 2005).

Department of Homeland Security. “Federal Emergency Management Agency, Disaster Relief Fund, Fiscal Year 2013 Congressional Justification”.

DOD Directive (DODD) 3025.18. *Defense Support of Civil Authorities*, 29 December 2010.

DOD Directive (DODD) 5105.83. *National Guard Joint Force Headquarters – State (NG JFHQs-State)*, 5 January 2011.

DOD Directive (DODD) 5111.13. *Assistant Secretary of Defense for Homeland Defense and America’s Security Affairs (ASD(HD&ASA))*, 16 January 2009.

DOD Directive (DODD) 6010.22. *National Disaster Medical System*, 21 January 2003.

DOD Directive (DODD) 7730.65. *Department of Defense Readiness Reporting System (DRRS)*, 23 April 2007.

Edwards, Col Richard (National Guard Bureau/A7X), author attended briefing, 22 February 2012.

Executive Order 12,127. Federal Emergency Management Agency, 31 March 1979.

Federal Emergency Management Agency. “National Level Exercise 2011 (NLE 11) Functional Exercise”, Draft After Action Report, 15 July 2011.

Federal Emergency Management Agency. HQ & DOD Mission Assignment Historical Analysis 2011

Fehrle, Lt Col Brett (National Guard Bureau/SGAX), author attended briefing, 23 February 2012.

FEMA. “About US&R,” <http://www.fema.gov/emergency/usr/about.shtm> (accessed 2 May 2012).

FEMA. "Emergency Management Assistance Compact (EMAC)," <http://www.fema.gov/pdf/emergency/nrf/EMACOverviewForNRF.pdf> (accessed 1 May 2012).

FEMA. "Incident Support Bases," <http://blog.fema.gov/2011/03/incident-support-bases-spring-flood.html> (accessed 2 May 2012).

FEMA. "Regional operations," <http://www.fema.gov/about/regions/index.shtm> (accessed 3 May 2012).

FEMA. *Disaster Operations Legal Reference*, Version 1.0, 1 November 2011.

Franklin, Ken (Senior Advisor, National Guard Civil Support (NGCS) Requirements Planning, National Guard Bureau/A7), interview by author 24 February 2012.

Fugate, Craig. Administrator of the Federal Emergency Management Agency. Address. 2012 Domestic Preparedness Workshop, National Harbor, Maryland, 23 February 2012.

Government Accountability Office. *Hurricane Katrina: Better Plans and Exercises Need to Guide the Military's Response to Catastrophic Natural Disasters*. Washington DC: Government Accountability Office, May 2006.

Homeland Security, *National Preparedness Goal, First Edition*. Washington DC: Department of Homeland Security, September 2011.

Homeland Security, *National Preparedness System*. Washington DC: Department of Homeland Security, November 2011.

Homeland Security. "Joint Field Office Activation and Operations," April 2006.

Homeland Security. "National Incident Management System," December 2008.

Homeland Security. "National Response Framework," January 2008.

Homeland Security. "Overview: ESF and Support Annexes Coordinating Federal Assistance In support of the National Response Framework," January 2008.

Joint Publication JP 3-28. *Civil Support*, 14 September 2007.

McKinley, Gen Craig R., Chief, National Guard Bureau. Address. 2012 Domestic Preparedness Workshop, National Harbor, Maryland, 22 February 2012.

National Guard Bureau J3/7 Lessons Learned Branch. "National Guard Bureau After Action Report, National Level Exercise (NLE) 2011", 3 August 2011.

National Guard Bureau. "Report on Air National Guard Catastrophic Events, Disaster Costs & Man-days," 20 February 2012.

National Guard Bureau/A7X. *Joint Staff Guidebook on Air National Guard Civil Engineer Capabilities*, Washington DC: Government Printing Office, 2011.

National Guard Regulation (NGR) 500-1/ANG Instruction (ANGI) 10-8101. *National Guard Domestic Operations*, 13 June 2008.

Nelson, CMSgt Paul (National Guard Bureau/A3XO), author attended briefing, 22 February 2012.

- Nelson, Col Gregory (123 AW/CC), interview by author, 12 February 2012.
- Rosenfield, Susan and Charles J. Gross, *Air National Guard at 60: A History*, Washington DC: Air National Guard History Office, 2008.
- Sherrill, Lt Col William (National Guard Bureau/A6CD), author attended briefing, 22 February 2012.
- Stockton, Dr. Paul., Assistant Secretary of Defense Homeland Defense and America's Security Affairs. Address. 2012 Domestic Preparedness Workshop, National Harbor, Maryland, 22 February 2012.
- The National Military Strategy of the United States, 2011.
- Timothy J Lowenburg. "The Role of the National Guard in National Defense and Homeland Security," *National Guard*, (Sep 2005): [97-102].
- United States Northern Command. *Civil Support Concept of Employment*, 20 August 2004.
- United States Northern Command. *Concept Plan (CONPLAN) 3501-09, Defense Support of Civil Authorities*, 2009.
- US Const. art. I, § 8.
- US Department of Health and Human Services (HHS). "Disaster Medical Assistance Team," <http://www.phe.gov/Preparedness/responders/ndms/teams/Pages/dmat.aspx> (accessed 1 May 21012).
- US Department of Health and Human Services (HHS). "Disaster Mortuary Operational Response Teams," <http://www.phe.gov/Preparedness/responders/ndms/teams/Pages/dmort.aspx> (accessed 2 May 2012).
- USTRANSCOM. "Integrated Training Summit," [http://www.integratedtrainingsummit.org/presentations/2011/main_training_summit/20 - patient_movement_system_continuum_of_care_from_the_patients_perspective.pdf](http://www.integratedtrainingsummit.org/presentations/2011/main_training_summit/20_patient_movement_system_continuum_of_care_from_the_patients_perspective.pdf) (accessed 2 May 2012).
- Valentine, Col Mark (J-34, Joint Directorate of Military Support), interview by author, 21 February 2012.